

SAFETY DATA SHEET



BG DFC Plus HP

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

1.1 Product identifier

Product name : BG DFC Plus HP
MSDS no. : 232
Product type : Liquid.
Other means of identification : Not available.

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

Identified uses
Other non-specified industry: Fuel additive.

1.3 Details of the supplier of the safety data sheet

Manufacturer : BG Products Inc.
701 S. Wichita Street
Wichita, KS, 67213, USA
www.bgprod.com

Importer : BG Products of Europe™
ASK House • Northgate Avenue
Bury St. Edmunds
Suffolk
IP32 6BB • UK
0044 (0)1284 777930

Only representative : HH Compliance Ltd.
Rubicon Centre, CIT Campus,
Bishopstown,
Cork
Ireland
+353-21-4868120
info@h2compliance.com

e-mail address of person responsible for this SDS : msds@bgprod.com

1.4 Emergency telephone number

Emergency telephone number : 00 +1 703-527-3887 (CHEMTREC INTL)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

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

Flam. Liq. 3, H226

Carc. 2, H351

Repr. 2, H361d

Asp. Tox. 1, H304

Aquatic Chronic 2, H411

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

SECTION 2: Hazards identification

Hazard pictograms :



Signal word :

Danger

Hazard statements :

Flammable liquid and vapour.
Suspected of damaging the unborn child.
Suspected of causing cancer.
May be fatal if swallowed and enters airways.
Toxic to aquatic life with long lasting effects.

Precautionary statements

General :

Not applicable.

Prevention :

Obtain special instructions before use. Wear protective gloves. Wear eye or face protection. Keep away from heat, sparks, open flames and hot surfaces. - No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. Avoid release to the environment.

Response :

IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

Storage :

Keep cool.

Disposal :

Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazardous ingredients :

2-(2-methoxyethoxy)ethanol
naphthalene

Supplemental label elements :

Not applicable.

Special packaging requirements

Containers to be fitted with child-resistant fastenings :

Not applicable.

Tactile warning of danger :

Not applicable.

2.3 Other hazards

Other hazards which do not result in classification :

None known.

SECTION 3: Composition/information on ingredients

Substance/mixture :

Mixture

Product/ingredient name	Identifiers	%	Classification	
			Regulation (EC) No. 1272/2008 [CLP]	Type
Europe Solvent naphtha (petroleum), heavy arom.	EC: 265-198-5	>=25, <35	Asp. Tox. 1, H304	[1]
2-(2-methoxyethoxy) ethanol	CAS: 64742-94-5 Index: 649-424-00-3 EC: 203-906-6	>=5, <10	Repr. 2, H361d	[1] [2]
xylene	CAS: 111-77-3 Index: 603-107-00-6 EC: 215-535-7 CAS: 1330-20-7 Index: 601-022-00-9	>=1, <5	Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315	[1] [2]
naphthalene	EC: 202-049-5 CAS: 91-20-3	>=2.5, <3	Acute Tox. 4, H302 Carc. 2, H351	[1] [2]

SECTION 3: Composition/information on ingredients

Solvent naphtha (petroleum), light arom.	Index: 601-052-00-2 EC: 265-199-0	<10	Aquatic Acute 1, H400 Aquatic Chronic 1, H410 Flam. Liq. 2, H225	[1]
1,2,4-trimethylbenzene	CAS: 64742-95-6 Index: 649-356-00-4 EC: 202-436-9 CAS: 95-63-6 Index: 601-043-00-3	>=2.5, <3	Eye Irrit. 2, H319 Asp. Tox. 1, H304 Flam. Liq. 3, H226 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Chronic 2, H411	[1] [2]
ethylbenzene	EC: 202-849-4 CAS: 100-41-4 Index: 601-023-00-4	>=1, <3	Flam. Liq. 2, H225 Acute Tox. 4, H332	[1] [2]
mesitylene	EC: 203-604-4 CAS: 108-67-8 Index: 601-025-00-5	<0.25	Flam. Liq. 3, H226 STOT SE 3, H335 Aquatic Chronic 2, H411	[1] [2]
See Section 16 for the full text of the H statements declared above.				

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs or vPvBs or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit
- [3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
- [4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII
- [5] Substance of equivalent concern

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

SECTION 4: First aid measures

4.1 Description of first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

4.2 Most important symptoms and effects, both acute and delayed

SECTION 4: First aid measures

Potential acute health effects

- Eye contact** : May cause eye irritation.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : May cause skin irritation.
- Ingestion** : No known significant effects or critical hazards.

Over-exposure signs/symptoms

- Eye contact** : No specific data.
- Inhalation** : Adverse symptoms may include the following:
reduced foetal weight
increase in foetal deaths
skeletal malformations
- Skin contact** : Adverse symptoms may include the following:
reduced foetal weight
increase in foetal deaths
skeletal malformations
- Ingestion** : Adverse symptoms may include the following:
reduced foetal weight
increase in foetal deaths
skeletal malformations

4.3 Indication of any immediate medical attention and special treatment needed

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media** : Use dry chemical, CO₂, water spray (fog) or foam.
- Unsuitable extinguishing media** : Do not use water jet.

5.2 Special hazards arising from the substance or mixture

- Hazards from the substance or mixture** : Flammable liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide

5.3 Advice for firefighters

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool. This material is toxic to aquatic organisms. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flames, smoking or flames in hazard area. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also Section 8 for additional information on hygiene measures.

6.2 Environmental precautions

- : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

6.3 Methods and material for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product.

6.4 Reference to other sections

- : See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Avoid exposure during pregnancy. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapour or mist. Avoid release to the environment. Refer to special instructions/safety data sheet. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by earthing and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

SECTION 7: Handling and storage

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

Seveso Directive - Reporting thresholds (in tonnes)

Danger criteria

Category	Notification and MAPP threshold	Safety report threshold
P5c: Flammable liquids 2 and 3 not falling under P5a or P5b	5000	50000
E2: Hazardous to the aquatic environment - Chronic 2	200	500
C6: Flammable (R10)	5000	50000
C9ii: Toxic for the environment	200	500

7.3 Specific end use(s)

Recommendations : Not available.

Industrial sector specific solutions : Not available.

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
Europe	
2-(2-methoxyethoxy)ethanol	EU OEL (Europe, 12/2009). Absorbed through skin. Notes: list of indicative occupational exposure limit values TWA: 50.1 mg/m ³ 8 hours.
xylene	EU OEL (Europe, 12/2009). Absorbed through skin. Notes: list of indicative occupational exposure limit values TWA: 10 ppm 8 hours.
naphthalene	EU OEL (Europe, 12/2009). Notes: list of indicative occupational exposure limit values TWA: 50 ppm 8 hours. TWA: 221 mg/m ³ 8 hours. STEL: 100 ppm 15 minutes. STEL: 442 mg/m ³ 15 minutes.
1,2,4-trimethylbenzene	EU OEL (Europe, 12/2009). Notes: list of indicative occupational exposure limit values TWA: 10 ppm 8 hours. TWA: 50 mg/m ³ 8 hours.
ethylbenzene	EU OEL (Europe, 12/2009). Notes: list of indicative occupational exposure limit values TWA: 20 ppm 8 hours. TWA: 100 mg/m ³ 8 hours.
mesitylene	EU OEL (Europe, 12/2009). Absorbed through skin. Notes: list of indicative occupational exposure limit values TWA: 100 ppm 8 hours. TWA: 442 mg/m ³ 8 hours. STEL: 200 ppm 15 minutes. STEL: 884 mg/m ³ 15 minutes.
Austria	EU OEL (Europe, 12/2009). Notes: list of indicative occupational exposure limit values TWA: 20 ppm 8 hours. TWA: 100 mg/m ³ 8 hours.

SECTION 8: Exposure controls/personal protection

2-(2-methoxyethoxy)ethanol	GKV_MAK (Austria, 12/2011). Absorbed through skin. TWA: 10 ppm 8 hours. TWA: 50.1 mg/m ³ 8 hours.
xylene	GKV_MAK (Austria, 12/2011). Absorbed through skin. PEAK: 442 mg/m ³ , 4 times per shift, 15 minutes. TWA: 50 ppm 8 hours. PEAK: 100 ppm, 4 times per shift, 15 minutes. TWA: 221 mg/m ³ 8 hours.
naphthalene	GKV_MAK (Austria, 12/2011). Absorbed through skin. TWA: 10 ppm 8 hours. TWA: 50 mg/m ³ 8 hours.
1,2,4-trimethylbenzene	GKV_MAK (Austria, 12/2011). PEAK: 30 ppm, 4 times per shift, 15 minutes. TWA: 100 mg/m ³ 8 hours. PEAK: 150 mg/m ³ , 4 times per shift, 15 minutes. TWA: 20 ppm 8 hours.
ethylbenzene	GKV_MAK (Austria, 12/2011). Absorbed through skin. TWA: 100 ppm 8 hours. TWA: 440 mg/m ³ 8 hours. CEIL: 200 ppm, 8 times per shift, 5 minutes. CEIL: 880 mg/m ³ , 8 times per shift, 5 minutes.
mesitylene	GKV_MAK (Austria, 12/2011). PEAK: 30 ppm, 4 times per shift, 15 minutes. TWA: 100 mg/m ³ 8 hours. PEAK: 150 mg/m ³ , 4 times per shift, 15 minutes. TWA: 20 ppm 8 hours.
Czech Republic	
Solvent naphtha (petroleum), heavy arom.	MZCR PEL/NPK-P (Czech Republic, 2/2012). TWA: 200 mg/m ³ 8 hours. STEL: 1000 mg/m ³ 15 minutes.
2-(2-methoxyethoxy)ethanol	MZCR PEL/NPK-P (Czech Republic, 2/2012). Absorbed through skin. STEL: 20.3 ppm 15 minutes. TWA: 10.15 ppm 8 hours. TWA: 50 mg/m ³ 8 hours. STEL: 100 mg/m ³ 15 minutes.
xylene	MZCR PEL/NPK-P (Czech Republic, 2/2012). Absorbed through skin. TWA: 200 mg/m ³ 8 hours. TWA: 46 ppm 8 hours. STEL: 400 mg/m ³ 15 minutes. STEL: 92 ppm 15 minutes.
naphthalene	MZCR PEL/NPK-P (Czech Republic, 2/2012). TWA: 50 mg/m ³ 8 hours. TWA: 9.55 ppm 8 hours. STEL: 100 mg/m ³ 15 minutes. STEL: 19.1 ppm 15 minutes.
Solvent naphtha (petroleum), light arom.	MZCR PEL/NPK-P (Czech Republic, 2/2012). TWA: 200 mg/m ³ 8 hours. STEL: 1000 mg/m ³ 15 minutes.
1,2,4-trimethylbenzene	MZCR PEL/NPK-P (Czech Republic, 2/2012). Absorbed through skin. TWA: 100 mg/m ³ 8 hours. TWA: 20.3 ppm 8 hours. STEL: 250 mg/m ³ 15 minutes. STEL: 50.75 ppm 15 minutes.
ethylbenzene	MZCR PEL/NPK-P (Czech Republic, 2/2012). Absorbed through skin. TWA: 200 mg/m ³ 8 hours. TWA: 46 ppm 8 hours. STEL: 500 mg/m ³ 15 minutes. STEL: 115 ppm 15 minutes.
mesitylene	MZCR PEL/NPK-P (Czech Republic, 2/2012). Absorbed through

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France

2-(2-methoxyethoxy)ethanol

skin.
TWA: 100 mg/m³ 8 hours.
TWA: 20.3 ppm 8 hours.
STEL: 250 mg/m³ 15 minutes.
STEL: 50.75 ppm 15 minutes.

Ministère du travail (France, 7/2012). Absorbed through skin. Notes: Regulatory indicative exposure limits, Decree of 30/06/2004 as last amended by Decree of 26/10/2007, pursuant to article R. 4412-150 of the Labour Act.

TWA: 50.1 mg/m³ 8 hours.
TWA: 10 ppm 8 hours.

xylene

Ministère du travail (France, 7/2012). Absorbed through skin. Notes: regulatory binding exposure limits, decreet n° 2007-1539 of 26/10/2007, pursuant to article R. 4412-149 of the Labour Act .

STEL: 442 mg/m³ 15 minutes.
STEL: 100 ppm 15 minutes.
TWA: 221 mg/m³ 8 hours.
TWA: 50 ppm 8 hours.

naphthalene

Ministère du travail (France, 7/2012). Notes: indicative exposure limits as published in Circulars between 1982 and 1996.

TWA: 10 ppm 8 hours.
TWA: 50 mg/m³ 8 hours.

1,2,4-trimethylbenzene

Ministère du travail (France, 7/2012). Notes: regulatory binding exposure limits, decreet n° 2007-1539 of 26/10/2007, pursuant to article R. 4412-149 of the Labour Act .

TWA: 20 ppm 8 hours.
TWA: 100 mg/m³ 8 hours.
STEL: 250 mg/m³ 15 minutes.
STEL: 50 ppm 15 minutes.

ethylbenzene

Ministère du travail (France, 7/2012). Absorbed through skin. Notes: regulatory binding exposure limits, decreet n° 2007-1539 of 26/10/2007, pursuant to article R. 4412-149 of the Labour Act .

TWA: 20 ppm 8 hours.
TWA: 88.4 mg/m³ 8 hours.
STEL: 442 mg/m³ 15 minutes.
STEL: 100 ppm 15 minutes.

mesitylene

Ministère du travail (France, 7/2012). Notes: regulatory binding exposure limits, decreet n° 2007-1539 of 26/10/2007, pursuant to article R. 4412-149 of the Labour Act .

TWA: 100 mg/m³ 8 hours.
TWA: 20 ppm 8 hours.
STEL: 250 mg/m³ 15 minutes.
STEL: 50 ppm 15 minutes.

Germany

2-(2-methoxyethoxy)ethanol

TRGS900 AGW (Germany, 1/2012). Absorbed through skin.

TWA: 50 mg/m³ 8 hours.
TWA: 10 ppm 8 hours.

xylene

TRGS900 AGW (Germany, 1/2012). Absorbed through skin.

TWA: 440 mg/m³ 8 hours.
PEAK: 880 mg/m³ 15 minutes.
TWA: 100 ppm 8 hours.
PEAK: 200 ppm 15 minutes.

naphthalene

TRGS900 AGW (Germany, 1/2012). Absorbed through skin.

TWA: 0.1 ppm 8 hours. Form: inhalable fraction
TWA: 0.5 mg/m³ 8 hours. Form: inhalable fraction
PEAK: 0.1 ppm 15 minutes. Form: inhalable fraction
PEAK: 0.5 mg/m³ 15 minutes. Form: inhalable fraction

1,2,4-trimethylbenzene

TRGS900 AGW (Germany, 1/2012).

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ethylbenzene	TWA: 100 mg/m ³ 8 hours. PEAK: 200 mg/m ³ 15 minutes. TWA: 20 ppm 8 hours. PEAK: 40 ppm 15 minutes.
	TRGS900 AGW (Germany, 1/2012). Absorbed through skin. TWA: 440 mg/m ³ 8 hours. PEAK: 880 mg/m ³ 15 minutes.
mesitylene	TWA: 100 ppm 8 hours. PEAK: 200 ppm 15 minutes.
	TRGS900 AGW (Germany, 1/2012). TWA: 100 mg/m ³ 8 hours. PEAK: 200 mg/m ³ 15 minutes.
Ireland 2-(2-methoxyethoxy)ethanol	TWA: 20 ppm 8 hours. PEAK: 40 ppm 15 minutes.
xylene	NAOSH (Ireland, 5/2010). Absorbed through skin. OELV-8hr: 50.1 mg/m ³ 8 hours. OELV-8hr: 10 ppm 8 hours.
naphthalene	NAOSH (Ireland, 5/2010). Absorbed through skin. OELV-8hr: 50 ppm 8 hours. OELV-8hr: 221 mg/m ³ 8 hours. OELV-15min: 100 ppm 15 minutes. OELV-15min: 442 mg/m ³ 15 minutes.
1,2,4-trimethylbenzene	NAOSH (Ireland, 5/2010). OELV-8hr: 10 ppm 8 hours. OELV-8hr: 50 mg/m ³ 8 hours. OELV-15min: 15 ppm 15 minutes. OELV-15min: 75 mg/m ³ 15 minutes.
ethylbenzene	NAOSH (Ireland, 5/2010). OELV-8hr: 100 mg/m ³ 8 hours. OELV-8hr: 20 ppm 8 hours.
mesitylene	NAOSH (Ireland, 5/2010). Absorbed through skin. OELV-8hr: 100 ppm 8 hours. OELV-8hr: 435 mg/m ³ 8 hours. OELV-15min: 125 ppm 15 minutes. OELV-15min: 545 mg/m ³ 15 minutes.
Italy 2-(2-methoxyethoxy)ethanol	NAOSH (Ireland, 5/2010). OELV-8hr: 20 ppm 8 hours. OELV-8hr: 100 mg/m ³ 8 hours.
xylene	Ministero della Salute (Italy, 8/2009). Absorbed through skin. 8 hours: 10 ppm 8 hours. 8 hours: 50.1 mg/m ³ 8 hours.
naphthalene	Ministero della Salute (Italy, 8/2009). Absorbed through skin. 8 hours: 50 ppm 8 hours. 8 hours: 221 mg/m ³ 8 hours. Short Term: 100 ppm 15 minutes. Short Term: 442 mg/m ³ 15 minutes.
1,2,4-trimethylbenzene	EU OEL (Europe, 12/2009). Notes: list of indicative occupational exposure limit values TWA: 10 ppm 8 hours. TWA: 50 mg/m ³ 8 hours.
ethylbenzene	Ministero della Salute (Italy, 8/2009). 8 hours: 20 ppm 8 hours. 8 hours: 100 mg/m ³ 8 hours.
mesitylene	Ministero della Salute (Italy, 8/2009). Absorbed through skin. 8 hours: 100 ppm 8 hours. 8 hours: 442 mg/m ³ 8 hours. Short Term: 200 ppm 15 minutes. Short Term: 884 mg/m ³ 15 minutes.
mesitylene	Ministero della Salute (Italy, 8/2009). 8 hours: 20 ppm 8 hours.

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<p>Netherlands</p>	<p>8 hours: 100 mg/m³ 8 hours.</p>
<p>2-(2-methoxyethoxy)ethanol</p>	<p>MinSZW Wettelijke Grenswaarden (Netherlands, 6/2011). Absorbed through skin. OEL, 8-h TWA: 45 mg/m³ 8 hours.</p>
<p>xylene</p>	<p>MinSZW Wettelijke Grenswaarden (Netherlands, 6/2011). Absorbed through skin. OEL, 8-h TWA: 210 mg/m³ 8 hours. STEL, 15-min ref: 442 mg/m³ 15 minutes.</p>
<p>naphthalene</p>	<p>MinSZW Wettelijke Grenswaarden (Netherlands, 6/2011). OEL, 8-h TWA: 50 mg/m³ 8 hours. STEL, 15-min ref: 80 mg/m³ 15 minutes.</p>
<p>1,2,4-trimethylbenzene</p>	<p>MinSZW Wettelijke Grenswaarden (Netherlands, 6/2011). OEL, 8-h TWA: 100 mg/m³ 8 hours. STEL, 15-min ref: 200 mg/m³ 15 minutes.</p>
<p>ethylbenzene</p>	<p>MinSZW Wettelijke Grenswaarden (Netherlands, 6/2011). Absorbed through skin. OEL, 8-h TWA: 215 mg/m³ 8 hours. STEL, 15-min ref: 430 mg/m³ 15 minutes.</p>
<p>mesitylene</p>	<p>MinSZW Wettelijke Grenswaarden (Netherlands, 6/2011). OEL, 8-h TWA: 100 mg/m³ 8 hours. STEL, 15-min ref: 200 mg/m³ 15 minutes.</p>
<p>Norway</p>	
<p>2-(2-methoxyethoxy)ethanol</p>	<p>Arbeidstilsynet (Norway, 12/2011). Absorbed through skin. Reproductive toxin. TWA: 10 ppm 8 hours. TWA: 50 mg/m³ 8 hours.</p>
<p>xylene</p>	<p>Arbeidstilsynet (Norway, 12/2011). Absorbed through skin. TWA: 25 ppm 8 hours. TWA: 108 mg/m³ 8 hours.</p>
<p>naphthalene</p>	<p>Arbeidstilsynet (Norway, 12/2011). TWA: 10 ppm 8 hours. TWA: 50 mg/m³ 8 hours.</p>
<p>1,2,4-trimethylbenzene</p>	<p>Arbeidstilsynet (Norway, 12/2011). TWA: 100 mg/m³ 8 hours. TWA: 20 ppm 8 hours.</p>
<p>ethylbenzene</p>	<p>Arbeidstilsynet (Norway, 12/2011). Absorbed through skin. Carcinogen. TWA: 5 ppm 8 hours. TWA: 20 mg/m³ 8 hours.</p>
<p>mesitylene</p>	<p>Arbeidstilsynet (Norway, 12/2011). TWA: 20 ppm 8 hours. TWA: 100 mg/m³ 8 hours.</p>
<p>Poland</p>	
<p>2-(2-methoxyethoxy)ethanol</p>	<p>Rozporządzenie Ministra Pracy i Polityki Społecznej (Dz. U. 2002 Nr 217, poz. 1833, z późn. zm.) (Poland, 12/2011). TWA: 50 mg/m³ 8 hours.</p>
<p>xylene</p>	<p>Rozporządzenie Ministra Pracy i Polityki Społecznej (Dz. U. 2002 Nr 217, poz. 1833, z późn. zm.) (Poland, 12/2011). TWA: 100 mg/m³ 8 hours.</p>
<p>naphthalene</p>	<p>Rozporządzenie Ministra Pracy i Polityki Społecznej (Dz. U. 2002 Nr 217, poz. 1833, z późn. zm.) (Poland, 12/2011). TWA: 20 mg/m³ 8 hours. STEL: 50 mg/m³ 15 minutes.</p>
<p>1,2,4-trimethylbenzene</p>	<p>Rozporządzenie Ministra Pracy i Polityki Społecznej (Dz. U. 2002 Nr 217, poz. 1833, z późn. zm.) (Poland, 12/2011). TWA: 100 mg/m³ 8 hours. STEL: 170 mg/m³ 15 minutes.</p>
<p>ethylbenzene</p>	<p>Rozporządzenie Ministra Pracy i Polityki Społecznej (Dz. U. 2002 Nr 217, poz. 1833, z późn. zm.) (Poland, 12/2011). TWA: 200 mg/m³ 8 hours. STEL: 400 mg/m³ 15 minutes.</p>

SECTION 8: Exposure controls/personal protection

mesitylene	Rozporządzenie Ministra Pracy i Polityki Społecznej (Dz. U. 2002 Nr 217, poz. 1833, z późn. zm.) (Poland, 12/2011). TWA: 100 mg/m ³ 8 hours. STEL: 170 mg/m ³ 15 minutes.
Romania	
Solvent naphtha (petroleum), heavy arom.	Ministerul Muncii, Familiei si Protectiei Sociale și Ministerul Sănătății (Romania, 1/2012). Absorbed through skin. VLA: 100 mg/m ³ 8 hours. Short term: 200 mg/m ³ 15 minutes.
2-(2-methoxyethoxy)ethanol	Ministerul Muncii, Familiei si Protectiei Sociale și Ministerul Sănătății (Romania, 1/2012). Absorbed through skin. VLA: 50.1 mg/m ³ 8 hours. VLA: 10 ppm 8 hours.
xylene	Ministerul Muncii, Familiei si Protectiei Sociale și Ministerul Sănătății (Romania, 1/2012). Absorbed through skin. VLA: 221 mg/m ³ 8 hours. VLA: 50 ppm 8 hours. Short term: 442 mg/m ³ 15 minutes. Short term: 100 ppm 15 minutes.
naphthalene	Ministerul Muncii, Familiei si Protectiei Sociale și Ministerul Sănătății (Romania, 1/2012). VLA: 50 mg/m ³ 8 hours. VLA: 9.5 ppm 8 hours.
Solvent naphtha (petroleum), light arom.	Ministerul Muncii, Familiei si Protectiei Sociale și Ministerul Sănătății (Romania, 1/2012). Absorbed through skin. VLA: 100 mg/m ³ 8 hours. Short term: 200 mg/m ³ 15 minutes.
1,2,4-trimethylbenzene	Ministerul Muncii, Familiei si Protectiei Sociale și Ministerul Sănătății (Romania, 1/2012). VLA: 100 mg/m ³ 8 hours. VLA: 20 ppm 8 hours.
ethylbenzene	Ministerul Muncii, Familiei si Protectiei Sociale și Ministerul Sănătății (Romania, 1/2012). Absorbed through skin. VLA: 442 mg/m ³ 8 hours. VLA: 100 ppm 8 hours. Short term: 884 mg/m ³ 15 minutes. Short term: 200 ppm 15 minutes.
mesitylene	Ministerul Muncii, Familiei si Protectiei Sociale și Ministerul Sănătății (Romania, 1/2012). VLA: 100 mg/m ³ 8 hours. VLA: 20 ppm 8 hours.
Slovakia	
2-(2-methoxyethoxy)ethanol	Nariadenie vlády Slovenskej republiky (Slovakia, 12/2011). Absorbed through skin. TWA: 10 ppm 8 hours. TWA: 50.1 mg/m ³ 8 hours.
xylene	Nariadenie vlády Slovenskej republiky (Slovakia, 12/2011). Absorbed through skin. TWA: 221 mg/m ³ 8 hours. TWA: 50 ppm 8 hours. STEL: 442 mg/m ³ 15 minutes. STEL: 100 ppm 15 minutes.
naphthalene	Nariadenie vlády Slovenskej republiky (Slovakia, 12/2011). Absorbed through skin. TWA: 50 mg/m ³ 8 hours. TWA: 10 ppm 8 hours. STEL: 80 mg/m ³ 15 minutes. STEL: 15 ppm 15 minutes.
1,2,4-trimethylbenzene	Nariadenie vlády Slovenskej republiky (Slovakia, 12/2011). TWA: 100 mg/m ³ 8 hours. TWA: 20 ppm 8 hours.
ethylbenzene	Nariadenie vlády Slovenskej republiky (Slovakia, 12/2011).

SECTION 8: Exposure controls/personal protection

mesitylene	<p>Absorbed through skin. TWA: 442 mg/m³ 8 hours. TWA: 100 ppm 8 hours. STEL: 884 mg/m³ 15 minutes. STEL: 200 ppm 15 minutes.</p> <p>Nariadenie Vlády Slovenskej republiky (Slovakia, 12/2011). TWA: 100 mg/m³ 8 hours. TWA: 20 ppm 8 hours.</p>
Turkey	
2-(2-methoxyethoxy)ethanol	<p>TR ISGGM OEL (Turkey, 3/2008). Absorbed through skin. TWA: 50.1 mg/m³ 8 hours. TWA: 10 ppm 8 hours.</p>
xylene	<p>TR ISGGM OEL (Turkey, 3/2008). Absorbed through skin. TWA: 221 mg/m³ 8 hours. TWA: 50 ppm 8 hours. STEL: 442 mg/m³ 15 minutes. STEL: 100 ppm 15 minutes.</p>
naphthalene	<p>TR ISGGM OEL (Turkey, 3/2008). TWA: 50 mg/m³ 8 hours. TWA: 10 ppm 8 hours.</p>
1,2,4-trimethylbenzene	<p>TR ISGGM OEL (Turkey, 3/2008). TWA: 100 mg/m³ 8 hours. TWA: 20 ppm 8 hours.</p>
ethylbenzene	<p>TR ISGGM OEL (Turkey, 3/2008). Absorbed through skin. TWA: 442 mg/m³ 8 hours. TWA: 100 ppm 8 hours. STEL: 884 mg/m³ 15 minutes. STEL: 200 ppm 15 minutes.</p>
mesitylene	<p>TR ISGGM OEL (Turkey, 3/2008). TWA: 100 mg/m³ 8 hours. TWA: 20 ppm 8 hours.</p>
United Kingdom (UK)	
2-(2-methoxyethoxy)ethanol	<p>EH40/2005 WELs (United Kingdom (UK), 12/2011). Absorbed through skin. TWA: 10 ppm 8 hours. TWA: 50.1 mg/m³ 8 hours.</p>
xylene	<p>EH40/2005 WELs (United Kingdom (UK), 12/2011). Absorbed through skin. STEL: 441 mg/m³ 15 minutes. TWA: 50 ppm 8 hours. TWA: 220 mg/m³ 8 hours. STEL: 100 ppm 15 minutes.</p>
naphthalene	<p>EU OEL (Europe, 12/2009). Notes: list of indicative occupational exposure limit values TWA: 10 ppm 8 hours. TWA: 50 mg/m³ 8 hours.</p>
1,2,4-trimethylbenzene	<p>EH40/2005 WELs (United Kingdom (UK), 12/2011). TWA: 25 ppm 8 hours. TWA: 125 mg/m³ 8 hours.</p>
ethylbenzene	<p>EH40/2005 WELs (United Kingdom (UK), 12/2011). Absorbed through skin. STEL: 552 mg/m³ 15 minutes. STEL: 125 ppm 15 minutes. TWA: 100 ppm 8 hours. TWA: 441 mg/m³ 8 hours.</p>
mesitylene	<p>EH40/2005 WELs (United Kingdom (UK), 12/2011). TWA: 25 ppm 8 hours. TWA: 125 mg/m³ 8 hours.</p>

SECTION 8: Exposure controls/personal protection

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Derived effect levels

No DELs available.

Predicted effect concentrations

No PECs available.

8.2 Exposure controls

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

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields. Recommended: safety glasses with side-shields. (EN 166)

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. > 8 hours (breakthrough time): Solvent. Chemical-resistant gloves. (EN 374) thickness (minimum) (0.4 mm)

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. Refer to European Standard EN 1149 for further information on material and design requirements and test methods. Recommended: Wear work clothing with long sleeves.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Recommended: Wear protective shoes. (EN ISO 20345)

SECTION 8: Exposure controls/personal protection

- Respiratory protection** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Recommended: If operating conditions cause high gas concentrations to be produced or any recommended or statutory exposure limit is exceeded, use an air-fed respirator or self-contained breathing apparatus.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties****Appearance**

- Physical state** : Liquid.
- Colour** : Amber.
- Odour** : Solvents
- Odour threshold** : Not available.
- pH** : Not available.
- Melting point/freezing point** : Not available.
- Initial boiling point and boiling range** : Not available.
- Flash point** : Closed cup: 54°C [Pensky-Martens.]
- Evaporation rate** : Not available.
- Flammability (solid, gas)** : Not available.
- Burning time** : Not applicable.
- Burning rate** : Not applicable.
- Upper/lower flammability or explosive limits** : Not available.
- Vapour pressure** : Not available.
- Vapour density** : Not available.
- Relative density** : 0.9227
- Solubility(ies)** : Insoluble in the following materials: cold water and hot water.
- Partition coefficient: n-octanol/water** : Not available.
- Auto-ignition temperature** : Not available.
- Decomposition temperature** : Not available.
- Viscosity** : Kinematic (40°C): 0.1074 cm²/s
- Explosive properties** : Not available.
- Oxidising properties** : Not available.

9.2 Other information**SECTION 10: Stability and reactivity**

- 10.1 Reactivity** : No specific test data related to reactivity available for this product or its ingredients.
- 10.2 Chemical stability** : The product is stable.
- 10.3 Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- 10.4 Conditions to avoid** : Avoid all possible sources of ignition (spark or flame). Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
- 10.5 Incompatible materials** : Reactive or incompatible with the following materials:
oxidizing materials

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SECTION 10: Stability and reactivity

10.6 Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
xylene	LC50 Inhalation Gas.	Rat	5000 ppm	4 hours
	LD50 Oral	Rat	4300 mg/kg	-
naphthalene	LD50 Dermal	Rabbit	>20 g/kg	-
	LD50 Oral	Rat	490 mg/kg	-
Solvent naphtha (petroleum), light arom. 1,2,4-trimethylbenzene	LD50 Oral	Rat	8400 mg/kg	-
	LC50 Inhalation Vapour	Rat	18000 mg/m ³	4 hours
ethylbenzene	LD50 Oral	Rat	5 g/kg	-
	LD50 Dermal	Rabbit	>5000 mg/kg	-
mesitylene	LD50 Oral	Rat	3500 mg/kg	-
	LC50 Inhalation Vapour	Rat	24000 mg/m ³	4 hours
	LD50 Oral	Rat	5000 mg/kg	-

Conclusion/Summary : Not available.

Route	ATE value

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Solvent naphtha (petroleum), heavy arom. 2-(2-methoxyethoxy)ethanol	Skin - Mild irritant	Rabbit	-	24 hours 500 microliters	-
	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Eyes - Moderate irritant	Rabbit	-	500 milligrams	-
xylene	Eyes - Mild irritant	Rabbit	-	87 milligrams	-
	Eyes - Severe irritant	Rabbit	-	24 hours 5 milligrams	-
	Skin - Mild irritant	Rat	-	8 hours 60 microliters	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 milligrams	-
naphthalene	Skin - Moderate irritant	Rabbit	-	100 Percent	-
	Skin - Mild irritant	Rabbit	-	495 milligrams	-
	Skin - Severe irritant	Rabbit	-	24 hours 0.05 Milliliters	-
Solvent naphtha (petroleum), light arom. ethylbenzene	Eyes - Mild irritant	Rabbit	-	24 hours 100 microliters	-
	Eyes - Severe irritant	Rabbit	-	500 milligrams	-
mesitylene	Skin - Mild irritant	Rabbit	-	24 hours 15 milligrams	-
	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-

Conclusion/Summary : Not available.

Sensitisation

Conclusion/Summary : Not available.

Mutagenicity

Conclusion/Summary : Not available.

Carcinogenicity

SECTION 11: Toxicological information

Conclusion/Summary	: Not available.
<u>Reproductive toxicity</u>	
Conclusion/Summary	: Not available.
<u>Teratogenicity</u>	
Conclusion/Summary	: Not available.
Information on the likely routes of exposure	: Not available.
<u>Potential acute health effects</u>	
Eye contact	: May cause eye irritation.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: May cause skin irritation.
Ingestion	: No known significant effects or critical hazards.
<u>Symptoms related to the physical, chemical and toxicological characteristics</u>	
Eye contact	: No specific data.
Inhalation	: Adverse symptoms may include the following: reduced foetal weight increase in foetal deaths skeletal malformations
Skin contact	: Adverse symptoms may include the following: reduced foetal weight increase in foetal deaths skeletal malformations
Ingestion	: Adverse symptoms may include the following: reduced foetal weight increase in foetal deaths skeletal malformations
<u>Delayed and immediate effects and also chronic effects from short and long term exposure</u>	
<u>Short term exposure</u>	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
<u>Long term exposure</u>	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
<u>Potential chronic health effects</u>	
Not available.	
Conclusion/Summary	: Not available.
General	: No known significant effects or critical hazards.
Carcinogenicity	: May cause cancer, based on animal data. Limited evidence of a carcinogenic effect. Risk of cancer depends on duration and level of exposure.
Mutagenicity	: No known significant effects or critical hazards.
Teratogenicity	: May cause birth defects, based on animal data.
Developmental effects	: No known significant effects or critical hazards.
Fertility effects	: No known significant effects or critical hazards.
Other information	: Not available.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
2-(2-methoxyethoxy)ethanol xylene	Acute LC50 7500000 µg/l Fresh water	Fish - Lepomis macrochirus	96 hours
	Acute LC50 8500 µg/l Marine water	Crustaceans - Palaemonetes pugio	48 hours
naphthalene	Acute LC50 13400 µg/l Fresh water	Fish - Pimephales promelas	96 hours
	Acute EC50 1600 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 2350 µg/l Marine water	Crustaceans - Palaemonetes pugio	48 hours
	Acute LC50 213 µg/l Fresh water	Fish - Melanotaenia fluviatilis - Larvae	96 hours
1,2,4-trimethylbenzene	Acute LC50 4910 µg/l Marine water	Crustaceans - Elasmopus pectinicus - Adult	48 hours
ethylbenzene	Acute LC50 7720 µg/l Fresh water	Fish - Pimephales promelas	96 hours
	Acute EC50 4600 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 3600 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
	Acute EC50 2930 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 5200 µg/l Marine water	Crustaceans - Americamysis bahia	48 hours
	Acute LC50 4200 µg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours
mesitylene	Chronic NOEC 1000 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
	Acute LC50 13000 µg/l Marine water	Crustaceans - Cancer magister - Zoea	48 hours
	Acute LC50 12520 µg/l Fresh water	Fish - Carassius auratus	96 hours
	Chronic NOEC 400 µg/l Fresh water	Daphnia - Daphnia magna	21 days

Conclusion/Summary : Not available.

12.2 Persistence and degradability

Conclusion/Summary : Not available.

12.3 Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
2-(2-methoxyethoxy)ethanol	-1.14 to 0.93	-	low
xylene	3.16	-	high
naphthalene	3.3	85.11	low
1,2,4-trimethylbenzene	3.63	120.23	high
ethylbenzene	3.15	-	high
mesitylene	3.42	186.21	high

12.4 Mobility in soil

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

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

PBT : Not applicable.

vPvB : Not applicable.

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

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods

Product

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Hazardous waste : The classification of the product may meet the criteria for a hazardous waste.

Packaging

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Special precautions

: This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapour from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

	ADR/RID	DOT Classification	IMDG	IATA
14.1 UN number	UN1993	UN1993	UN1993	UN1993
14.2 UN proper shipping name	FLAMMABLE LIQUIDS, N.O.S. (xylene, Solvent naphtha (petroleum), light arom.)	FLAMMABLE LIQUIDS, N.O.S. (xylene, Solvent naphtha (petroleum), light arom.)	FLAMMABLE LIQUIDS, N.O.S. (xylene, Solvent naphtha (petroleum), light arom.)	FLAMMABLE LIQUIDS, N.O.S. (xylene, Solvent naphtha (petroleum), light arom.)
14.3 Transport hazard class(es)	3 	3 	3 	3 
14.4 Packing group	III	III	III	III
14.5 Environmental hazards	Yes.	Yes.	Yes.	No.
Additional information	Special provisions 640 (E) Tunnel code (D/E)	This product may be re-classified as "Combustible Liquid," unless transported by vessel or aircraft. Non-bulk packages (less than or equal to 119 gal) of combustible liquids are not regulated as hazardous materials in package sizes less than the product reportable quantity.	The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg. Emergency schedules (EmS) F-E, S-E	Passenger and Cargo Aircraft Quantity limitation: 60 L Cargo Aircraft Only Quantity limitation: 220 L Limited Quantities - Passenger Aircraft Quantity limitation: 10 L

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SECTION 14: Transport information

14.6 Special precautions for user : **Transport within user's premises**: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

SECTION 15: Regulatory information

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

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Not applicable.

Other EU regulations

Europe inventory : Not determined.

Black List Chemicals : Not listed

Priority List Chemicals : Listed

Integrated pollution prevention and control list (IPPC) - Air : Not listed

Integrated pollution prevention and control list (IPPC) - Water : Not listed

Product/ingredient name	Carcinogenic effects	Mutagenic effects	Developmental effects	Fertility effects
2-(2-methoxyethoxy)ethanol	-	-	Repr. Cat. 3; R63	-
naphthalene	Carc. Cat. 3; R40	-	-	-

National regulations

Austria

Product/ingredient name	List name	Name on list	Classification	Notes
naphthalene	Austria Occupational Exposure Limits	Naphthalin	Carc. B	-

VbF class : A II
Very dangerous flammable liquid.

Limitation of the use of organic solvents : Permitted.

Czech Republic

Storage code : II

France

Product/ingredient name	List name	Name on list	Classification	Notes
2-(2-methoxyethoxy)ethanol	France Occupational Exposure Limits	2-(2-méthoxyéthoxy)éthanol	Repro. R2	-
naphthalene	France Occupational Exposure Limits	naphthalène	Carc. C2	-

Social Security Code, Articles L 461-1 to L 461-7 :

Solvent naphtha (petroleum), heavy arom.	RG 84
2-(2-methoxyethoxy)ethanol	RG 84
xylene	RG 4bis
Solvent naphtha (petroleum), light arom.	RG 84

SECTION 15: Regulatory information

Reinforced medical surveillance : Act of July 11, 1977 determining the list of activities which require reinforced medical surveillance: not applicable

Germany

Storage code : 3

Hazardous incident ordinance : Applicable. Category: 9b Dangerous for the environment.

Hazard class for water : 3 Appendix No. 4

Technical instruction on air quality control : TA-Luft Number 5.2.5: 22.6-70.2%
TA-Luft Class I - Number 5.2.5: 15.4-100%

Ireland

Italy

D.Lgs. 152/06 : Not classified.

Netherlands

Product/ingredient name	List name	Name on list	Classification	Notes
Solvent naphtha (petroleum), heavy arom.	Netherlands Carcinogenic Chemicals	(complexe) aardolie- en steenkoolderivaten EG nrs. beginnend met 232, 263, 265-275, 277, 278, 283-285, 287, 289, 291-298, 300, 302, 305-310	Carc.	Part of these derivates are only classified as carcinogenic if the content of benzene > 0.1% and/or benzo(a) pyrene > 0.005% or 1,3-butadiene > 0,1% or DMSO-extract > 3%. Please refer to Publicatieblad L381 of December 31th, 1994: the 21st amendment of Directive 67/548/EEC or later amendments of this Directive.
2-(2-methoxyethoxy)ethanol	Netherlands Reprotoxic Chemicals	2-(2-methoxyethoxy) ethanol; DEGME	Dev. development category 2	-
xylene	Netherlands Reprotoxic Chemicals	xyleen	Dev. development category 3	-
naphthalene	Netherlands Carcinogenic Chemicals	polycyclische aromatische koolwaterstoffen	Carc.	-
Solvent naphtha (petroleum), light arom.	Netherlands Carcinogenic Chemicals	(complexe) aardolie- en steenkoolderivaten EG nrs. beginnend met 232, 263, 265-275, 277, 278, 283-285, 287, 289, 291-298, 300, 302, 305-310	Carc.	Part of these derivates are only classified as carcinogenic if the content of benzene > 0.1% and/or benzo(a) pyrene > 0.005% or 1,3-butadiene > 0,1% or DMSO-extract > 3%. Please refer to Publicatieblad L381 of December 31th,

SECTION 15: Regulatory information

1994: the 21st amendment of Directive 67/548/EEC or later amendments of this Directive.

Water Discharge Policy (ABM) : Contains a black-list substance. Harmful to aquatic organisms. Contains substances that are harmful to the aquatic environment. Abatement effort: A

Norway

Product/ingredient name	List name	Name on list	Classification	Notes
2-(2-methoxyethoxy)ethanol	Norway Occupational Exposure Limits	2-(2-metoksyetoksy) etanol	Repro. R	-
ethylbenzene	Norway Occupational Exposure Limits	etylbenzen	Carc. K	-

Poland

Product/ingredient name	List name	Name on list	Classification	Notes
Solvent naphtha (petroleum), light arom.	Poland Carcinogen, Mutagen chemicals	Solwent nafta (ropa naftowa), węglowodory lekkie aromatyczne; niskowrząca benzyna - niespecyfikowana	Carc.. cat.2	-

Romania

Product/ingredient name	List name	Name on list	Classification	Notes
naphthalene	Romania Ministry of Social Assistance and Family Policies and Ministry of Public Health	Hidrocarburi policiclice aromatice (fracțiunea extractibilă în benzen)	Carc. C	-

Slovakia

Turkey

United Kingdom (UK)

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol (Annexes A, B, C, E)

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Inform Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

International lists

National inventory

Australia : Not determined.

Canada : Not determined.

China : Not determined.

SECTION 15: Regulatory information

Japan	: Not determined.
Malaysia	: Not determined.
New Zealand	: Not determined.
Philippines	: Not determined.
Republic of Korea	: Not determined.
Taiwan	: Not determined.
United States	: United States inventory (TSCA 8b) : Not determined.
15.2 Chemical Safety Assessment	: Not yet complete.

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms	: ATE = Acute Toxicity Estimate CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008] DNEL = Derived No Effect Level EUH statement = CLP-specific Hazard statement PNEC = Predicted No Effect Concentration RRN = REACH Registration Number
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Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Flam. Liq. 3, H226
Carc. 2, H351
Repr. 2, H361d
Asp. Tox. 1, H304
Aquatic Chronic 2, H411

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Flam. Liq. 3, H226 Carc. 2, H351 Repr. 2, H361d Asp. Tox. 1, H304 Aquatic Chronic 2, H411	On basis of test data Calculation method Calculation method Calculation method Calculation method

Europe

Full text of abbreviated H statements	: H225 Highly flammable liquid and vapour. H226 Flammable liquid and vapour. H302 Harmful if swallowed. H304 May be fatal if swallowed and enters airways. H312 Harmful in contact with skin. H315 Causes skin irritation. H319 Causes serious eye irritation. H332 Harmful if inhaled. H335 May cause respiratory irritation. H351 Suspected of causing cancer. H361d Suspected of damaging the unborn child. 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.
Full text of classifications [CLP/GHS]	: Acute Tox. 4, H302 ACUTE TOXICITY: ORAL - Category 4 Acute Tox. 4, H312 ACUTE TOXICITY: SKIN - Category 4 Acute Tox. 4, H332 ACUTE TOXICITY: INHALATION - Category 4 Aquatic Acute 1, H400 ACUTE AQUATIC HAZARD - Category 1 Aquatic Chronic 1, H410 LONG-TERM AQUATIC HAZARD - Category 1 Aquatic Chronic 2, H411 LONG-TERM AQUATIC HAZARD - Category 2 Asp. Tox. 1, H304 ASPIRATION HAZARD - Category 1 Carc. 2, H351 CARCINOGENICITY - Category 2 Eye Irrit. 2, H319 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2 Flam. Liq. 2, H225 FLAMMABLE LIQUIDS - Category 2

SECTION 16: Other information

Flam. Liq. 3, H226
Repr. 2, H361d
Skin Irrit. 2, H315
STOT SE 3, H335

FLAMMABLE LIQUIDS - Category 3
TOXIC TO REPRODUCTION [Unborn child] - Category 2
SKIN CORROSION/IRRITATION - Category 2
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) [Respiratory tract irritation] - Category 3

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Prepared by : Kolin Anglin, Environmental Coordinator
316-265-2686
msds@bgprod.com

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