SAFETY DATA SHEET

Agilent Technologies

D5501 Calibration Standards and Linearity Mix, Part Number G3440-85033

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

1.1 Product identifier

Product name : D5501 Calibration Standards and Linearity Mix, Part Number G3440-85033

Part No. (Kit) : G3440-85033

Part No. :

Mix 1	Not available.
Mix 2	Not available.
Mix 3	Not available.
Mix 4	Not available.
Mix 5	Not available.
Mix 6	Not available.

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

Identified uses	
Analytical chemistry.	
2 ml ampoule	
Mix 1	1 ml
Mix 2	1 ml
Mix 3	1 ml
Mix 4	1 ml
Mix 5	1 ml
Mix 6	1 ml

1.3 Details of the supplier of the safety data sheet

Agilent Technologies Manufacturing GmbH & Co. KG
Hewlett-Packard-Str. 8
76337 Waldbronn
Germany
0800 603 1000

e-mail address of person responsible for this SDS : pdl-msds_author@agilent.com

1.4 Emergency telephone number

Emergency telephone number (with hours of operation) : CHEMTREC®: +(44)-870-8200418

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition :

Mix 1	Mixture
Mix 2	Mixture
Mix 3	Mixture
Mix 4	Mixture
Mix 5	Mixture
Mix 6	Mixture

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

Mix 1

H225	FLAMMABLE LIQUIDS - Category 2
H315	SKIN CORROSION/IRRITATION - Category 2
H336	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
H304	ASPIRATION HAZARD - Category 1
H400	ACUTE AQUATIC HAZARD - Category 1
H410	LONG-TERM AQUATIC HAZARD - Category 1

SECTION 2: Hazards identification

Mix 2

H225	FLAMMABLE LIQUIDS - Category 2
H315	SKIN CORROSION/IRRITATION - Category 2
H336	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
H304	ASPIRATION HAZARD - Category 1
H400	ACUTE AQUATIC HAZARD - Category 1
H410	LONG-TERM AQUATIC HAZARD - Category 1

Mix 3

H225	FLAMMABLE LIQUIDS - Category 2
H315	SKIN CORROSION/IRRITATION - Category 2
H336	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
H304	ASPIRATION HAZARD - Category 1
H411	LONG-TERM AQUATIC HAZARD - Category 2

Mix 4

H225	FLAMMABLE LIQUIDS - Category 2
H304	ASPIRATION HAZARD - Category 1
H411	LONG-TERM AQUATIC HAZARD - Category 2

Mix 5

H225	FLAMMABLE LIQUIDS - Category 2
H304	ASPIRATION HAZARD - Category 1
H412	LONG-TERM AQUATIC HAZARD - Category 3

Mix 6

H225	FLAMMABLE LIQUIDS - Category 2
H332	ACUTE TOXICITY (inhalation) - Category 4
H315	SKIN CORROSION/IRRITATION - Category 2
H319	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2
H335 and H336	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation and Narcotic effects) - Category 3
H304	ASPIRATION HAZARD - Category 1
H400	ACUTE AQUATIC HAZARD - Category 1
H410	LONG-TERM AQUATIC HAZARD - Category 1

Ingredients of unknown toxicity :

Mix 1	Not applicable.
Mix 2	Not applicable.
Mix 3	Not applicable.
Mix 4	Not applicable.
Mix 5	Not applicable.
Mix 6	Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 42.2%

Ingredients of unknown ecotoxicity :

Mix 1	Not applicable.
Mix 2	Not applicable.
Mix 3	Not applicable.
Mix 4	Not applicable.
Mix 5	Not applicable.
Mix 6	Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 9.6%

Classification according to Directive 1999/45/EC [DPD]

Mix 1	The product is classified as dangerous according to Directive 1999/45/EC and its amendments.
Mix 2	The product is classified as dangerous according to Directive 1999/45/EC and its amendments.
Mix 3	The product is classified as dangerous according to Directive 1999/45/EC and its amendments.
Mix 4	The product is classified as dangerous according to Directive 1999/45/EC and its amendments.
Mix 5	The product is classified as dangerous according to Directive 1999/45/EC and its amendments.
Mix 6	The product is classified as dangerous according to Directive 1999/45/EC and its

SECTION 2: Hazards identification

amendments.

Classification	:	Mix 1	F; R11 Xn; R65 Xi; R38 R67 N; R50/53
		Mix 2	F; R11 Xn; R65 Xi; R38 R67 N; R50/53
		Mix 3	F; R11 Xn; R65 Xi; R38 R67 N; R51/53
		Mix 4	F; R11 Xn; R65 N; R51/53
		Mix 5	F; R11 Xn; R65 R52/53
		Mix 6	F; R11 Xn; R65 Xi; R38 R67 N; R50/53
Physical/chemical hazards	:	Mix 1	Highly flammable.
		Mix 2	Highly flammable.
		Mix 3	Highly flammable.
		Mix 4	Highly flammable.
		Mix 5	Highly flammable.
		Mix 6	Highly flammable.
Human health hazards	:	Mix 1	Harmful: may cause lung damage if swallowed. Irritating to skin. Vapours may cause drowsiness and dizziness.
		Mix 2	Harmful: may cause lung damage if swallowed. Irritating to skin. Vapours may cause drowsiness and dizziness.
		Mix 3	Harmful: may cause lung damage if swallowed. Irritating to skin. Vapours may cause drowsiness and dizziness.
		Mix 4	Harmful: may cause lung damage if swallowed.
		Mix 5	Harmful: may cause lung damage if swallowed.
		Mix 6	Harmful: may cause lung damage if swallowed. Irritating to skin. Vapours may cause drowsiness and dizziness.
Environmental hazards	:	Mix 1	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
		Mix 2	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
		Mix 3	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
		Mix 4	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
		Mix 5	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
		Mix 6	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

See Section 16 for the full text of the R phrases or 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 :

Mix 1	Danger
Mix 2	Danger
Mix 3	Danger
Mix 4	Danger
Mix 5	Danger
Mix 6	Danger

Hazard statements :

Mix 1

GHS02 -
Highly flammable liquid and vapour.
GHS07 -
Causes skin irritation.
May cause drowsiness or dizziness.
GHS08 -
May be fatal if swallowed and enters airways.
GHS09 -
Very toxic to aquatic life with long lasting effects.

Mix 2

GHS02 -
Highly flammable liquid and vapour.
GHS07 -
Causes skin irritation.
May cause drowsiness or dizziness.
GHS08 -
May be fatal if swallowed and enters airways.
GHS09 -
Very toxic to aquatic life with long lasting effects.

Mix 3

GHS02 -
Highly flammable liquid and vapour.
GHS07 -
Causes skin irritation.
May cause drowsiness or dizziness.
GHS08 -
May be fatal if swallowed and enters airways.
GHS09 -
Toxic to aquatic life with long lasting effects.

Mix 4

GHS02 -
Highly flammable liquid and vapour.
GHS08 -
May be fatal if swallowed and enters airways.
GHS09 -
Toxic to aquatic life with long lasting effects.

Mix 5

GHS02 -
Highly flammable liquid and vapour.
GHS08 -
May be fatal if swallowed and enters airways.
Harmful to aquatic life with long lasting effects.

Mix 6

GHS02 -
Highly flammable liquid and vapour.
GHS07 -
Harmful if inhaled.
Causes skin irritation.
May cause respiratory irritation.
Causes serious eye irritation.
May cause drowsiness or dizziness.
GHS08 -
May be fatal if swallowed and enters airways.
GHS09 -
Very toxic to aquatic life with long lasting effects.

Precautionary statements

SECTION 2: Hazards identification

Prevention	:	Mix 1	P280 - Wear protective gloves. Wear eye or face protection. P210 - Keep away from heat, sparks, open flames and hot surfaces. - No smoking. P241 - Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. P273 - Avoid release to the environment.
		Mix 2	P280 - Wear protective gloves. Wear eye or face protection. P210 - Keep away from heat, sparks, open flames and hot surfaces. - No smoking. P241 - Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. P273 - Avoid release to the environment.
		Mix 3	P280 - Wear protective gloves. Wear eye or face protection. P210 - Keep away from heat, sparks, open flames and hot surfaces. - No smoking. P241 - Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. P273 - Avoid release to the environment.
		Mix 4	P280 - Wear protective gloves. Wear eye or face protection. P210 - Keep away from heat, sparks, open flames and hot surfaces. - No smoking. P241 - Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. P273 - Avoid release to the environment.
		Mix 5	P280 - Wear protective gloves. Wear eye or face protection. P210 - Keep away from heat, sparks, open flames and hot surfaces. - No smoking. P241 - Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. P273 - Avoid release to the environment.
		Mix 6	P280 - Wear protective gloves. Wear eye or face protection. P210 - Keep away from heat, sparks, open flames and hot surfaces. - No smoking. P241 - Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. P273 - Avoid release to the environment.
Response	:	Mix 1	P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P301 + P310 + P331 - IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting. P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
		Mix 2	P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P301 + P310 + P331 - IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting. P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
		Mix 3	P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P301 + P310 + P331 - IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting. P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
		Mix 4	P301 + P310 + P331 - IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting. P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
		Mix 5	P301 + P310 + P331 - IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting. P303 + P361 + P353 - IF ON SKIN (or hair): Take off

SECTION 2: Hazards identification

		Mix 6	immediately all contaminated clothing. Rinse skin with water or shower. P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P301 + P310 + P331 - IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting. P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
Storage	:	Mix 1	P235 - Keep cool.
		Mix 2	P235 - Keep cool.
		Mix 3	P235 - Keep cool.
		Mix 4	P235 - Keep cool.
		Mix 5	P235 - Keep cool.
		Mix 6	P235 - Keep cool.
Disposal	:	Mix 1	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
		Mix 2	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
		Mix 3	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
		Mix 4	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
		Mix 5	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
		Mix 6	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
Hazardous ingredients	:	**Mix 1** 2,2,4-trimethylpentane	
		Mix 2 2,2,4-trimethylpentane	
		Mix 3 2,2,4-trimethylpentane n-Heptane	
		Mix 4 2,2,4-trimethylpentane n-Heptane	
		Mix 6 Decane n-Heptane Octane Nonane	
Supplemental label elements	:	Mix 1	Not applicable.
		Mix 2	Not applicable.
		Mix 3	Not applicable.
		Mix 4	Not applicable.
		Mix 5	Not applicable.
		Mix 6	Not applicable.
Special packaging requirements			
Tactile warning of danger	:	Mix 1	Not applicable.
		Mix 2	Not applicable.
		Mix 3	Not applicable.
		Mix 4	Not applicable.
		Mix 5	Not applicable.
		Mix 6	Not applicable.

2.3 Other hazards

SECTION 2: Hazards identification

Other hazards which do not result in classification :

Mix 1	Defatting to the skin. Prolonged or repeated contact may dry skin and cause irritation.
Mix 2	Defatting to the skin. Prolonged or repeated contact may dry skin and cause irritation.
Mix 3	Defatting to the skin. Prolonged or repeated contact may dry skin and cause irritation.
Mix 4	Defatting to the skin. Prolonged or repeated contact may dry skin and cause irritation.
Mix 5	Defatting to the skin.
Mix 6	Defatting to the skin. Prolonged or repeated contact may dry skin and cause irritation.

SECTION 3: Composition/information on ingredients

Substance/mixture :

Mix 1	Mixture
Mix 2	Mixture
Mix 3	Mixture
Mix 4	Mixture
Mix 5	Mixture
Mix 6	Mixture

Product/ingredient name	Identifiers	%	Classification 67/548/EEC	Classification Regulation (EC) No. 1272/2008 [CLP]	Type
Mix 1					
2,2,4-trimethylpentane	EC: 208-759-1 CAS: 540-84-1 Index: 601-009-00-8	>=50 - <75	F; R11 Xn; R65 Xi; R38 R67 N; R50/53	Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336 (Narcotic effects) Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	[1]
n-Heptane	EC: 205-563-8 CAS: 142-82-5 Index: 601-008-00-2	>=10 - <15	F; R11 Xn; R65 Xi; R38 R67 N; R50/53	Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336 (Narcotic effects) Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	[1] [2]
Mix 2					
2,2,4-trimethylpentane	EC: 208-759-1 CAS: 540-84-1 Index: 601-009-00-8	>=35 - <50	F; R11 Xn; R65 Xi; R38 R67 N; R50/53	Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336 (Narcotic effects) Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	[1]
n-Heptane	EC: 205-563-8 CAS: 142-82-5 Index: 601-008-00-2	>=10 - <15	F; R11 Xn; R65 Xi; R38 R67 N; R50/53	Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336 (Narcotic effects) Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	[1] [2]
Mix 3					
2,2,4-trimethylpentane	EC: 208-759-1 CAS: 540-84-1 Index: 601-009-00-8	>=10 - <15	F; R11 Xn; R65 Xi; R38 R67 N; R50/53	Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336 (Narcotic effects) Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	[1]
n-Heptane	EC: 205-563-8	>=10 -	F; R11	Flam. Liq. 2, H225	[1] [2]

SECTION 3: Composition/information on ingredients

	CAS: 142-82-5 Index: 601-008-00-2	<15	Xn; R65 Xi; R38 R67 N; R50/53	Skin Irrit. 2, H315 STOT SE 3, H336 (Narcotic effects) Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	
Mix 4					
2,2,4-trimethylpentane	EC: 208-759-1 CAS: 540-84-1 Index: 601-009-00-8	>=5 - <10	F; R11 Xn; R65 Xi; R38 R67 N; R50/53	Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336 (Narcotic effects) Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	[1]
n-Heptane	EC: 205-563-8 CAS: 142-82-5 Index: 601-008-00-2	>=2.5 - <5	F; R11 Xn; R65 Xi; R38 R67 N; R50/53	Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336 (Narcotic effects) Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	[1] [2]
Mix 5					
n-Heptane	EC: 205-563-8 CAS: 142-82-5 Index: 601-008-00-2	>=0.25 - <1	F; R11 Xn; R65 Xi; R38 R67 N; R50/53	Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336 (Narcotic effects) Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	[1] [2]
Mix 6					
Decane	EC: 204-686-4 CAS: 124-18-5	>=10 - <20	R10 Xn; R65 R66	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 and H336 (Respiratory tract irritation and Narcotic effects) Asp. Tox. 1, H304 Aquatic Chronic 3, H412	[1]
n-Heptane	EC: 205-563-8 CAS: 142-82-5 Index: 601-008-00-2	>=10 - <15	F; R11 Xn; R65 Xi; R38 R67 N; R50/53	Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336 (Narcotic effects) Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	[1] [2]
Octane	EC: 203-892-1 CAS: 111-65-9 Index: 601-009-00-8	>=10 - <15	F; R11 Xn; R65 Xi; R38 R67 N; R50/53	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 and H336 (Respiratory tract irritation and Narcotic effects) Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	[1]
Undecane	EC: 214-300-6 CAS: 1120-21-4	>=10 - <20	Xn; R65 Xi; R36/37/38	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 (Respiratory tract irritation) Asp. Tox. 1, H304	[1]

SECTION 3: Composition/information on ingredients

				Aquatic Chronic 4, H413	
3-Methylhexane	EC: 209-643-3 CAS: 589-34-4 Index: 601-008-00-2	>=10 - <15	F; R11 Xn; R65 Xi; R38 R67 N; R50/53	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 and H336 (Respiratory tract irritation and Narcotic effects) Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	[1]
Nonane	EC: 203-913-4 CAS: 111-84-2	>=7 - <10	R10 Xn; R20, R65 Xi; R36/37/38	Flam. Liq. 3, H226 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 and H336 (Respiratory tract irritation and Narcotic effects) Asp. Tox. 1, H304	[1]
2,2-Dimethylbutane	EC: 200-906-8 CAS: 75-83-2 Index: 601-007-00-7	>=5 - <10	F; R11 Xn; R65 Xi; R38 R67 N; R51/53	Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336 (Narcotic effects) Asp. Tox. 1, H304 Aquatic Chronic 2, H411	[1]
2,2,4-trimethylpentane	EC: 208-759-1 CAS: 540-84-1 Index: 601-009-00-8	>=5 - <10	F; R11 Xn; R65 Xi; R38 R67 N; R50/53	Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336 (Narcotic effects) Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	[1]
2,4-Dimethylpentane	EC: 203-548-0 CAS: 108-08-7 Index: 601-008-00-2	>=5 - <10	F; R11 Xn; R65 Xi; R38 R67 N; R50/53	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 and H336 (Respiratory tract irritation and Narcotic effects) Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	[1]
Pentane	EC: 203-692-4 CAS: 109-66-0 Index: 601-006-00-1	>=2.5 - <10	F+; R12 Xn; R65 R66, R67 N; R51/53	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 and H336 (Respiratory tract irritation and Narcotic effects) Asp. Tox. 1, H304 Aquatic Chronic 2, H411	[1] [2]
			See Section 16 for the full text of the R-phrases declared above.	**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 and hence require reporting in this section.

Type

SECTION 3: Composition/information on ingredients

[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 :

Mix 1: 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.

Mix 2: 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.

Mix 3: 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.

Mix 4: 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.

Mix 5: 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.

Mix 6: 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.

Inhalation :

Mix 1: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. 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.

Mix 2: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. 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.

Mix 3: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-

SECTION 4: First aid measures

			mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. 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.
		Mix 4	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 adverse health effects persist or are severe. 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.
		Mix 5	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 adverse health effects persist or are severe. 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.
		Mix 6	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. 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	:	Mix 1	Wash skin thoroughly with soap and water or use recognised skin cleanser. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
		Mix 2	Wash skin thoroughly with soap and water or use recognised skin cleanser. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
		Mix 3	Wash skin thoroughly with soap and water or use recognised skin cleanser. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
		Mix 4	Wash skin thoroughly with soap and water or use recognised skin cleanser. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
		Mix 5	Wash skin thoroughly with soap and water or use recognised skin cleanser. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
		Mix 6	Wash skin thoroughly with soap and water or use recognised skin cleanser. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

SECTION 4: First aid measures

Ingestion :

Mix 1: Get medical attention immediately. Call a poison center or physician. 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. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Mix 2: Get medical attention immediately. Call a poison center or physician. 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. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Mix 3: Get medical attention immediately. Call a poison center or physician. 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. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Mix 4: Get medical attention immediately. Call a poison center or physician. 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. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Mix 5: Get medical attention immediately. Call a poison center or physician. 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. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept

SECTION 4: First aid measures

		low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
	Mix 6	Get medical attention immediately. Call a poison center or physician. 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. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Protection of first-aiders :	Mix 1	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
	Mix 2	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
	Mix 3	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
	Mix 4	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.
	Mix 5	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.
	Mix 6	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects

Eye contact :	Mix 1	Causes serious eye irritation.
	Mix 2	Causes serious eye irritation.
	Mix 3	Causes serious eye irritation.
	Mix 4	No known significant effects or critical hazards.
	Mix 5	No known significant effects or critical hazards.
	Mix 6	Causes serious eye irritation.

SECTION 4: First aid measures

Inhalation

: Mix 1: Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.

Mix 2: Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.

Mix 3: Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.

Mix 4: No known significant effects or critical hazards.

Mix 5: No known significant effects or critical hazards.

Mix 6: Harmful if inhaled. Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation.

Skin contact

: Mix 1: Causes skin irritation. Defatting to the skin.

Mix 2: Causes skin irritation. Defatting to the skin.

Mix 3: Causes skin irritation. Defatting to the skin.

Mix 4: Defatting to the skin. May cause skin dryness and irritation.

Mix 5: Defatting to the skin. May cause skin dryness and irritation.

Mix 6: Causes skin irritation. Defatting to the skin.

Ingestion

: Mix 1: Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways. Irritating to mouth, throat and stomach.

Mix 2: Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways. Irritating to mouth, throat and stomach.

Mix 3: Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways. Irritating to mouth, throat and stomach.

Mix 4: May be fatal if swallowed and enters airways.

Mix 5: May be fatal if swallowed and enters airways.

Mix 6: Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways. Irritating to mouth, throat and stomach.

Over-exposure signs/symptoms

Eye contact

: Mix 1: Adverse symptoms may include the following:
pain or irritation
watering
redness

Mix 2: Adverse symptoms may include the following:
pain or irritation
watering
redness

Mix 3: Adverse symptoms may include the following:
pain or irritation
watering
redness

Mix 4: No specific data.

Mix 5: No specific data.

Mix 6: Adverse symptoms may include the following:
pain or irritation
watering
redness

Inhalation

: Mix 1: Adverse symptoms may include the following:
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness

Mix 2: Adverse symptoms may include the following:
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness

Mix 3: Adverse symptoms may include the following:
nausea or vomiting

SECTION 4: First aid measures

			headache drowsiness/fatigue dizziness/vertigo unconsciousness
		Mix 4	No specific data.
		Mix 5	No specific data.
		Mix 6	Adverse symptoms may include the following: respiratory tract irritation coughing nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness
Skin contact	:	Mix 1	Adverse symptoms may include the following: irritation redness dryness cracking
		Mix 2	Adverse symptoms may include the following: irritation redness dryness cracking
		Mix 3	Adverse symptoms may include the following: irritation redness dryness cracking
		Mix 4	Adverse symptoms may include the following: irritation dryness cracking
		Mix 5	Adverse symptoms may include the following: irritation dryness cracking
		Mix 6	Adverse symptoms may include the following: irritation redness dryness cracking
Ingestion	:	Mix 1	Adverse symptoms may include the following: nausea or vomiting
		Mix 2	Adverse symptoms may include the following: nausea or vomiting
		Mix 3	Adverse symptoms may include the following: nausea or vomiting
		Mix 4	Adverse symptoms may include the following: nausea or vomiting
		Mix 5	Adverse symptoms may include the following: nausea or vomiting
		Mix 6	Adverse symptoms may include the following: nausea or vomiting

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician	:	Mix 1	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		Mix 2	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		Mix 3	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		Mix 4	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

SECTION 4: First aid measures

	Mix 5	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	Mix 6	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments :	Mix 1	No specific treatment.
	Mix 2	No specific treatment.
	Mix 3	No specific treatment.
	Mix 4	No specific treatment.
	Mix 5	No specific treatment.
	Mix 6	No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media :	Mix 1	Use dry chemical, CO_2, water spray (fog) or foam.
	Mix 2	Use dry chemical, CO_2, water spray (fog) or foam.
	Mix 3	Use dry chemical, CO_2, water spray (fog) or foam.
	Mix 4	Use dry chemical, CO_2, water spray (fog) or foam.
	Mix 5	Use dry chemical, CO_2, water spray (fog) or foam.
	Mix 6	Use dry chemical, CO_2, water spray (fog) or foam.
Unsuitable extinguishing media :	Mix 1	Do not use water jet.
	Mix 2	Do not use water jet.
	Mix 3	Do not use water jet.
	Mix 4	Do not use water jet.
	Mix 5	Do not use water jet.
	Mix 6	Do not use water jet.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture :	Mix 1	Highly flammable liquid and vapour. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapour/gas is heavier than air and will spread along the ground. Vapours may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard. This material is very toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
	Mix 2	Highly flammable liquid and vapour. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapour/gas is heavier than air and will spread along the ground. Vapours may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard. This material is very toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
	Mix 3	Highly flammable liquid and vapour. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapour/gas is heavier than air and will spread along the ground. Vapours may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard. This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
	Mix 4	Highly flammable liquid and vapour. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapour/gas is

SECTION 5: Firefighting measures

		heavier than air and will spread along the ground. Vapours may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard. This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
	Mix 5	Highly flammable liquid and vapour. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapour/gas is heavier than air and will spread along the ground. Vapours may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
	Mix 6	Highly flammable liquid and vapour. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapour/gas is heavier than air and will spread along the ground. Vapours may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard. This material is very toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
Hazardous combustion products :	Mix 1	Decomposition products may include the following materials: carbon dioxide carbon monoxide
	Mix 2	Decomposition products may include the following materials: carbon dioxide carbon monoxide
	Mix 3	Decomposition products may include the following materials: carbon dioxide carbon monoxide
	Mix 4	Decomposition products may include the following materials: carbon dioxide carbon monoxide
	Mix 5	Decomposition products may include the following materials: carbon dioxide carbon monoxide
	Mix 6	Decomposition products may include the following materials: carbon dioxide carbon monoxide

5.3 Advice for firefighters

Special precautions for fire-fighters :	Mix 1	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.
	Mix 2	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.
	Mix 3	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

SECTION 5: Firefighting measures

		risk. Use water spray to keep fire-exposed containers cool.
	Mix 4	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.
	Mix 5	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.
	Mix 6	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.
Special protective equipment for fire-fighters :	Mix 1	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.
	Mix 2	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.
	Mix 3	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.
	Mix 4	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.
	Mix 5	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.
	Mix 6	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 :	Mix 1	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 spilt material. Shut off all ignition sources. No flares, 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.

SECTION 6: Accidental release measures

	Mix 2	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 spilt material. Shut off all ignition sources. No flares, 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.
	Mix 3	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 spilt material. Shut off all ignition sources. No flares, 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.
	Mix 4	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 spilt material. Shut off all ignition sources. No flares, 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.
	Mix 5	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 spilt material. Shut off all ignition sources. No flares, 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.
	Mix 6	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 spilt material. Shut off all ignition sources. No flares, 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 :	Mix 1	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 the information in "For non-emergency personnel".
	Mix 2	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 the information in "For non-emergency personnel".
	Mix 3	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 the information in "For non-emergency personnel".
	Mix 4	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 the information in "For non-emergency personnel".
	Mix 5	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 the information in "For non-emergency personnel".

SECTION 6: Accidental release measures

	Mix 6	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 the information in "For non-emergency personnel".
6.2 Environmental precautions :	Mix 1	Avoid dispersal of spilt 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. Collect spillage.
	Mix 2	Avoid dispersal of spilt 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. Collect spillage.
	Mix 3	Avoid dispersal of spilt 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. Collect spillage.
	Mix 4	Avoid dispersal of spilt 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. Collect spillage.
	Mix 5	Avoid dispersal of spilt 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.
	Mix 6	Avoid dispersal of spilt 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. Collect spillage.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up :	Mix 1	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.
	Mix 2	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.
	Mix 3	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.
	Mix 4	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,

SECTION 6: Accidental release measures

	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.
Mix 5	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.
Mix 6	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.

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

7.1 Precautions for safe handling

Protective measures :

Mix 1	Put on appropriate personal protective equipment (see Section 8). Do not swallow. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.
Mix 2	Put on appropriate personal protective equipment (see Section 8). Do not swallow. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.
Mix 3	Put on appropriate personal protective equipment (see Section 8). Do not swallow. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take

SECTION 7: Handling and storage

precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

Mix 4

Put on appropriate personal protective equipment (see Section 8). Do not swallow. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

Mix 5

Put on appropriate personal protective equipment (see Section 8). Do not swallow. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

Mix 6

Put on appropriate personal protective equipment (see Section 8). Do not swallow. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene : Mix 1

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.

Mix 2

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.

Mix 3

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

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	Mix 4	Section 8 for additional information on hygiene measures. 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.
	Mix 5	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.
	Mix 6	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 :	Mix 1	Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.
	Mix 2	Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.
	Mix 3	Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.
	Mix 4	Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.
	Mix 5	Store in accordance with local regulations. Store in a

SECTION 7: Handling and storage

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

Mix 6 — Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

7.3 Specific end use(s)

Recommendations :

Mix 1	Industrial applications, Professional applications.
Mix 2	Industrial applications, Professional applications.
Mix 3	Industrial applications, Professional applications.
Mix 4	Industrial applications, Professional applications.
Mix 5	Industrial applications, Professional applications.
Mix 6	Industrial applications, Professional applications.

Industrial sector specific solutions : Not applicable.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
Mix 1	
n-Heptane	**EU OEL (Europe, 12/2009). Notes: list of indicative occupational exposure limit values** TWA: 2085 mg/m³ 8 hours. TWA: 500 ppm 8 hours.
Mix 2	
n-Heptane	**EU OEL (Europe, 12/2009). Notes: list of indicative occupational exposure limit values** TWA: 2085 mg/m³ 8 hours. TWA: 500 ppm 8 hours.
Mix 3	
n-Heptane	**EU OEL (Europe, 12/2009). Notes: list of indicative occupational exposure limit values** TWA: 2085 mg/m³ 8 hours. TWA: 500 ppm 8 hours.
Mix 4	
n-Heptane	**EU OEL (Europe, 12/2009). Notes: list of indicative occupational exposure limit values** TWA: 2085 mg/m³ 8 hours. TWA: 500 ppm 8 hours.
Mix 5	

SECTION 8: Exposure controls/personal protection

n-Heptane	**EU OEL (Europe, 12/2009). Notes: list of indicative occupational exposure limit values** TWA: 2085 mg/m³ 8 hours. TWA: 500 ppm 8 hours.
Mix 6	
n-Heptane	**EU OEL (Europe, 12/2009). Notes: list of indicative occupational exposure limit values** TWA: 2085 mg/m³ 8 hours. TWA: 500 ppm 8 hours.
Pentane	**EU OEL (Europe, 12/2009). Notes: list of indicative occupational exposure limit values** TWA: 3000 mg/m³ 8 hours. TWA: 1000 ppm 8 hours.

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 DNELs available.

Predicted effect concentrations

No PNECs 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: chemical splash goggles.

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.

SECTION 8: Exposure controls/personal protection

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.

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.

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.

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 :	Mix 1	Liquid. [Clear.]
	Mix 2	Liquid. [Clear.]
	Mix 3	Liquid. [Clear.]
	Mix 4	Liquid. [Clear.]
	Mix 5	Liquid. [Clear.]
	Mix 6	Liquid.
Colour :	Mix 1	Colourless.
	Mix 2	Colourless.
	Mix 3	Colourless.
	Mix 4	Colourless.
	Mix 5	Colourless.
	Mix 6	Colourless.
Odour :	Mix 1	Sweetish. Ethereal. Unpleasant.
	Mix 2	Sweetish. Ethereal. Unpleasant.
	Mix 3	Sweetish. Ethereal. Unpleasant.
	Mix 4	Sweetish. Ethereal. Unpleasant.
	Mix 5	Sweetish. Ethereal. Unpleasant.
	Mix 6	Gasoline-like
Odour threshold :	Mix 1	Not available.
	Mix 2	Not available.
	Mix 3	Not available.
	Mix 4	Not available.
	Mix 5	Not available.
	Mix 6	Not available.
pH :	Mix 1	Not available.
	Mix 2	Not available.
	Mix 3	Not available.
	Mix 4	Not available.
	Mix 5	Not available.
	Mix 6	Not available.
Melting point/freezing point :	Mix 1	-114°C
	Mix 2	-114°C
	Mix 3	-114°C
	Mix 4	-114°C
	Mix 5	-114°C
	Mix 6	-114°C

SECTION 9: Physical and chemical properties

Initial boiling point and boiling range	:	Mix 1	78.3°C
		Mix 2	78.3°C
		Mix 3	78.3°C
		Mix 4	78.3°C
		Mix 5	78.3°C
		Mix 6	98°C
Flash point	:	Mix 1	Closed cup: 14°C
		Mix 2	Closed cup: 14°C
		Mix 3	Closed cup: 14°C
		Mix 4	Closed cup: 14°C
		Mix 5	Closed cup: 14°C
		Mix 6	Closed cup: -4°C
Evaporation rate	:	Mix 1	2.4 (butyl acetate = 1)
		Mix 2	2.4 (butyl acetate = 1)
		Mix 3	2.4 (butyl acetate = 1)
		Mix 4	2.4 (butyl acetate = 1)
		Mix 5	2.4 (butyl acetate = 1)
		Mix 6	Not available.
Flammability (solid, gas)	:	Mix 1	Not applicable.
		Mix 2	Not applicable.
		Mix 3	Not applicable.
		Mix 4	Not applicable.
		Mix 5	Not applicable.
		Mix 6	Not applicable.
Upper/lower flammability or explosive limits	:	Mix 1	Lower: 3.3% Upper: 19%
		Mix 2	Lower: 3.3% Upper: 19%
		Mix 3	Lower: 3.3% Upper: 19%
		Mix 4	Lower: 3.3% Upper: 19%
		Mix 5	Lower: 3.3% Upper: 19%
		Mix 6	Lower: 1.05% Upper: 6.7%
Vapour pressure	:	Mix 1	5.9 kPa [room temperature]
		Mix 2	5.9 kPa [room temperature]
		Mix 3	5.9 kPa [room temperature]
		Mix 4	5.9 kPa [room temperature]
		Mix 5	5.9 kPa [room temperature]
		Mix 6	<5.3 kPa [room temperature]
Vapour density	:	Mix 1	1.59 [Air = 1]
		Mix 2	1.59 [Air = 1]
		Mix 3	1.59 [Air = 1]
		Mix 4	1.59 [Air = 1]
		Mix 5	1.59 [Air = 1]
		Mix 6	3.52 [Air = 1]
Relative density	:	Mix 1	0.789 [Water = 1]
		Mix 2	0.789 [Water = 1]
		Mix 3	0.789 [Water = 1]
		Mix 4	0.789 [Water = 1]
		Mix 5	0.789 [Water = 1]
		Mix 6	0.684 [Water = 1]
Solubility(ies)	:	Mix 1	Soluble in the following materials: cold water and hot water.
		Mix 2	Soluble in the following materials: cold water and hot water.
		Mix 3	Soluble in the following materials: cold water and hot water.
		Mix 4	Soluble in the following materials: cold water and hot water.
		Mix 5	Soluble in the following materials: cold water and hot

SECTION 9: Physical and chemical properties

			water.
		Mix 6	Insoluble in the following materials: cold water and hot water.
Partition coefficient: n-octanol/water	:	Mix 1	Not available.
		Mix 2	Not available.
		Mix 3	Not available.
		Mix 4	Not available.
		Mix 5	Not available.
		Mix 6	Not available.
Auto-ignition temperature	:	Mix 1	Not available.
		Mix 2	Not available.
		Mix 3	Not available.
		Mix 4	Not available.
		Mix 5	Not available.
		Mix 6	Not available.
Decomposition temperature	:	Mix 1	Not available.
		Mix 2	Not available.
		Mix 3	Not available.
		Mix 4	Not available.
		Mix 5	Not available.
		Mix 6	Not available.
Viscosity	:	Mix 1	Not available.
		Mix 2	Not available.
		Mix 3	Not available.
		Mix 4	Not available.
		Mix 5	Not available.
		Mix 6	Not available.
Explosive properties	:	Mix 1	Explosive in the presence of the following materials or conditions: oxidizing materials.
		Mix 2	Explosive in the presence of the following materials or conditions: oxidizing materials.
		Mix 3	Explosive in the presence of the following materials or conditions: oxidizing materials.
		Mix 4	Explosive in the presence of the following materials or conditions: oxidizing materials.
		Mix 5	Not available.
		Mix 6	Explosive in the presence of the following materials or conditions: oxidizing materials.

9.2 Other information

No additional information.

SECTION 10: Stability and reactivity

10.1 Reactivity	:	Mix 1	No specific test data related to reactivity available for this product or its ingredients.
		Mix 2	No specific test data related to reactivity available for this product or its ingredients.
		Mix 3	No specific test data related to reactivity available for this product or its ingredients.
		Mix 4	No specific test data related to reactivity available for this product or its ingredients.
		Mix 5	No specific test data related to reactivity available for this product or its ingredients.
		Mix 6	No specific test data related to reactivity available for this product or its ingredients.
10.2 Chemical stability	:	Mix 1	The product is stable.
		Mix 2	The product is stable.
		Mix 3	The product is stable.
		Mix 4	The product is stable.
		Mix 5	The product is stable.
		Mix 6	The product is stable.

SECTION 10: Stability and reactivity

10.3 Possibility of hazardous reactions

: Mix 1 — Under normal conditions of storage and use, hazardous reactions will not occur.

Mix 2 — Under normal conditions of storage and use, hazardous reactions will not occur.

Mix 3 — Under normal conditions of storage and use, hazardous reactions will not occur.

Mix 4 — Under normal conditions of storage and use, hazardous reactions will not occur.

Mix 5 — Under normal conditions of storage and use, hazardous reactions will not occur.

Mix 6 — Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid

: Mix 1 — 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. Do not allow vapor to accumulate in low or confined areas.

Mix 2 — 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. Do not allow vapor to accumulate in low or confined areas.

Mix 3 — 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. Do not allow vapor to accumulate in low or confined areas.

Mix 4 — 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. Do not allow vapor to accumulate in low or confined areas.

Mix 5 — 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. Do not allow vapor to accumulate in low or confined areas.

Mix 6 — 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. Do not allow vapor to accumulate in low or confined areas.

10.5 Incompatible materials

: Mix 1 — Reactive or incompatible with the following materials: oxidizing materials

Mix 2 — Reactive or incompatible with the following materials: oxidizing materials

Mix 3 — Reactive or incompatible with the following materials: oxidizing materials

Mix 4 — Reactive or incompatible with the following materials: oxidizing materials

Mix 5 — Reactive or incompatible with the following materials: oxidizing materials

Mix 6 — Reactive or incompatible with the following materials: oxidizing materials

10.6 Hazardous decomposition products

: Mix 1 — Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Mix 2 — Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Mix 3 — Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Mix 4 — Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Mix 5 — Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Mix 6 — 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
Mix 1				
2,2,4-trimethylpentane	LC50 Inhalation Dusts and mists	Rat	47.4 mg/l	1 hours
	LD50 Oral	Rat	>2500 mg/kg	-
n-Heptane	LC50 Inhalation Dusts and mists	Rat	103 g/m³	4 hours
	LC50 Inhalation Vapour	Rat	48000 ppm	4 hours
Mix 2				
2,2,4-trimethylpentane	LC50 Inhalation Dusts and mists	Rat	47.4 mg/l	1 hours
	LD50 Oral	Rat	>2500 mg/kg	-
n-Heptane	LC50 Inhalation Dusts and mists	Rat	103 g/m³	4 hours
	LC50 Inhalation Vapour	Rat	48000 ppm	4 hours
Mix 3				
2,2,4-trimethylpentane	LC50 Inhalation Dusts and mists	Rat	47.4 mg/l	1 hours
	LD50 Oral	Rat	>2500 mg/kg	-
n-Heptane	LC50 Inhalation Dusts and mists	Rat	103 g/m³	4 hours
	LC50 Inhalation Vapour	Rat	48000 ppm	4 hours
Mix 4				
2,2,4-trimethylpentane	LC50 Inhalation Dusts and mists	Rat	47.4 mg/l	1 hours
	LD50 Oral	Rat	>2500 mg/kg	-
n-Heptane	LC50 Inhalation Dusts and mists	Rat	103 g/m³	4 hours
	LC50 Inhalation Vapour	Rat	48000 ppm	4 hours
Mix 5				
n-Heptane	LC50 Inhalation Dusts and mists	Rat	103 g/m³	4 hours
	LC50 Inhalation Vapour	Rat	48000 ppm	4 hours
Mix 6				
n-Heptane	LC50 Inhalation Dusts and mists	Rat	103 g/m³	4 hours
	LC50 Inhalation Vapour	Rat	48000 ppm	4 hours
Octane	LC50 Inhalation Dusts and mists	Rat	118 g/m³	4 hours
	LC50 Inhalation Vapour	Rat	25260 ppm	4 hours
Nonane	LC50 Inhalation Gas.	Rat	3200 ppm	4 hours
	LC50 Inhalation Vapour	Rat	17000 mg/m³	4 hours
2,2,4-trimethylpentane	LC50 Inhalation Dusts and mists	Rat	47.4 mg/l	1 hours
	LD50 Oral	Rat	>2500 mg/kg	-
Pentane	LC50 Inhalation Vapour	Rat	364 g/m³	4 hours

Acute toxicity estimates

Route	ATE value
Mix 1	
Oral	16666.7 mg/kg
Dermal	50000 mg/kg
Inhalation (vapours)	500 mg/l
Mix 2	
Oral	20000 mg/kg
Dermal	60000 mg/kg
Inhalation (vapours)	600 mg/l
Mix 3	
Oral	33333.3 mg/kg
Dermal	100000 mg/kg
Inhalation (vapours)	1000 mg/l
Mix 4	
Oral	50000 mg/kg
Dermal	150000 mg/kg
Inhalation (vapours)	1500 mg/l

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Mix 5	
Oral	100000 mg/kg
Dermal	300000 mg/kg
Inhalation (vapours)	3000 mg/l
Mix 6	
Inhalation (gases)	19266.7 ppm
Inhalation (vapours)	102.4 mg/l

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Mix 6					
Nonane	Skin - Moderate irritant	Rat	-	96 hours 300 microliters	-

Sensitiser

Conclusion/Summary : Not available.

Chronic toxicity / Carcinogenicity / Mutagenicity / Teratogenicity / Reproductive toxicity

Not available.

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
Mix 1			
2,2,4-trimethylpentane	Category 3	Not applicable.	Narcotic effects
n-Heptane	Category 3	Not applicable.	Narcotic effects
Mix 2			
2,2,4-trimethylpentane	Category 3	Not applicable.	Narcotic effects
n-Heptane	Category 3	Not applicable.	Narcotic effects
Mix 3			
2,2,4-trimethylpentane	Category 3	Not applicable.	Narcotic effects
n-Heptane	Category 3	Not applicable.	Narcotic effects
Mix 4			
2,2,4-trimethylpentane	Category 3	Not applicable.	Narcotic effects
n-Heptane	Category 3	Not applicable.	Narcotic effects
Mix 5			
n-Heptane	Category 3	Not applicable.	Narcotic effects
Mix 6			
Decane	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
n-Heptane	Category 3	Not applicable.	Narcotic effects
Octane	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
Undecane	Category 3	Not applicable.	Respiratory tract irritation
3-Methylhexane	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
Nonane	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
2,2-Dimethylbutane	Category 3	Not applicable.	Narcotic effects
2,2,4-trimethylpentane	Category 3	Not applicable.	Narcotic effects
2,4-Dimethylpentane	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects

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Pentane	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Product/ingredient name	Result
Mix 1	
2,2,4-trimethylpentane	ASPIRATION HAZARD - Category 1
n-Heptane	ASPIRATION HAZARD - Category 1
Mix 2	
2,2,4-trimethylpentane	ASPIRATION HAZARD - Category 1
n-Heptane	ASPIRATION HAZARD - Category 1
Mix 3	
2,2,4-trimethylpentane	ASPIRATION HAZARD - Category 1
n-Heptane	ASPIRATION HAZARD - Category 1
Mix 4	
2,2,4-trimethylpentane	ASPIRATION HAZARD - Category 1
n-Heptane	ASPIRATION HAZARD - Category 1
Mix 5	
n-Heptane	ASPIRATION HAZARD - Category 1
Mix 6	
Decane	ASPIRATION HAZARD - Category 1
n-Heptane	ASPIRATION HAZARD - Category 1
Octane	ASPIRATION HAZARD - Category 1
Undecane	ASPIRATION HAZARD - Category 1
3-Methylhexane	ASPIRATION HAZARD - Category 1
Nonane	ASPIRATION HAZARD - Category 1
2,2-Dimethylbutane	ASPIRATION HAZARD - Category 1
2,2,4-trimethylpentane	ASPIRATION HAZARD - Category 1
2,4-Dimethylpentane	ASPIRATION HAZARD - Category 1
Pentane	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure : Not available.

Potential acute health effects

Inhalation :

Mix 1	Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.
Mix 2	Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.
Mix 3	Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.
Mix 4	No known significant effects or critical hazards.
Mix 5	No known significant effects or critical hazards.
Mix 6	Harmful if inhaled. Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation.

Ingestion :

Mix 1	Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways. Irritating to mouth, throat and stomach.
Mix 2	Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways. Irritating to mouth, throat and stomach.
Mix 3	Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways. Irritating to mouth, throat and stomach.
Mix 4	May be fatal if swallowed and enters airways.

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		Mix 5	May be fatal if swallowed and enters airways.
		Mix 6	Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways. Irritating to mouth, throat and stomach.
Skin contact	:	Mix 1	Causes skin irritation. Defatting to the skin.
		Mix 2	Causes skin irritation. Defatting to the skin.
		Mix 3	Causes skin irritation. Defatting to the skin.
		Mix 4	Defatting to the skin. May cause skin dryness and irritation.
		Mix 5	Defatting to the skin. May cause skin dryness and irritation.
		Mix 6	Causes skin irritation. Defatting to the skin.
Eye contact	:	Mix 1	Causes serious eye irritation.
		Mix 2	Causes serious eye irritation.
		Mix 3	Causes serious eye irritation.
		Mix 4	No known significant effects or critical hazards.
		Mix 5	No known significant effects or critical hazards.
		Mix 6	Causes serious eye irritation.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation	:	Mix 1	Adverse symptoms may include the following: nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness
		Mix 2	Adverse symptoms may include the following: nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness
		Mix 3	Adverse symptoms may include the following: nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness
		Mix 4	No specific data.
		Mix 5	No specific data.
		Mix 6	Adverse symptoms may include the following: respiratory tract irritation coughing nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness
Ingestion	:	Mix 1	Adverse symptoms may include the following: nausea or vomiting
		Mix 2	Adverse symptoms may include the following: nausea or vomiting
		Mix 3	Adverse symptoms may include the following: nausea or vomiting
		Mix 4	Adverse symptoms may include the following: nausea or vomiting
		Mix 5	Adverse symptoms may include the following: nausea or vomiting
		Mix 6	Adverse symptoms may include the following: nausea or vomiting

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Skin contact	:	Mix 1	Adverse symptoms may include the following: irritation redness dryness cracking
		Mix 2	Adverse symptoms may include the following: irritation redness dryness cracking
		Mix 3	Adverse symptoms may include the following: irritation redness dryness cracking
		Mix 4	Adverse symptoms may include the following: irritation dryness cracking
		Mix 5	Adverse symptoms may include the following: irritation dryness cracking
		Mix 6	Adverse symptoms may include the following: irritation redness dryness cracking
Eye contact	:	Mix 1	Adverse symptoms may include the following: pain or irritation watering redness
		Mix 2	Adverse symptoms may include the following: pain or irritation watering redness
		Mix 3	Adverse symptoms may include the following: pain or irritation watering redness
		Mix 4	No specific data.
		Mix 5	No specific data.
		Mix 6	Adverse symptoms may include the following: pain or irritation watering redness

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

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

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General	:	Mix 1	Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.
		Mix 2	Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.
		Mix 3	Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.
		Mix 4	Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.
		Mix 5	Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.
		Mix 6	Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.
Carcinogenicity	:	Mix 1	No known significant effects or critical hazards.
		Mix 2	No known significant effects or critical hazards.
		Mix 3	No known significant effects or critical hazards.
		Mix 4	No known significant effects or critical hazards.
		Mix 5	No known significant effects or critical hazards.
		Mix 6	No known significant effects or critical hazards.
Mutagenicity	:	Mix 1	No known significant effects or critical hazards.
		Mix 2	No known significant effects or critical hazards.
		Mix 3	No known significant effects or critical hazards.
		Mix 4	No known significant effects or critical hazards.
		Mix 5	No known significant effects or critical hazards.
		Mix 6	No known significant effects or critical hazards.
Teratogenicity	:	Mix 1	No known significant effects or critical hazards.
		Mix 2	No known significant effects or critical hazards.
		Mix 3	No known significant effects or critical hazards.
		Mix 4	No known significant effects or critical hazards.
		Mix 5	No known significant effects or critical hazards.
		Mix 6	No known significant effects or critical hazards.
Developmental effects	:	Mix 1	No known significant effects or critical hazards.
		Mix 2	No known significant effects or critical hazards.
		Mix 3	No known significant effects or critical hazards.
		Mix 4	No known significant effects or critical hazards.
		Mix 5	No known significant effects or critical hazards.
		Mix 6	No known significant effects or critical hazards.
Fertility effects	:	Mix 1	No known significant effects or critical hazards.
		Mix 2	No known significant effects or critical hazards.
		Mix 3	No known significant effects or critical hazards.
		Mix 4	No known significant effects or critical hazards.
		Mix 5	No known significant effects or critical hazards.
		Mix 6	No known significant effects or critical hazards.

Toxicokinetics

Absorption	:	Mix 1	Not available.
		Mix 2	Not available.
		Mix 3	Not available.
		Mix 4	Not available.
		Mix 5	Not available.
		Mix 6	Not available.
Distribution	:	Mix 1	Not available.
		Mix 2	Not available.
		Mix 3	Not available.
		Mix 4	Not available.
		Mix 5	Not available.
		Mix 6	Not available.
Metabolism	:	Mix 1	Not available.
		Mix 2	Not available.
		Mix 3	Not available.
		Mix 4	Not available.
		Mix 5	Not available.
		Mix 6	Not available.

SECTION 11: Toxicological information

Elimination : Mix 1 — Not available.
Mix 2 — Not available.
Mix 3 — Not available.
Mix 4 — Not available.
Mix 5 — Not available.
Mix 6 — Not available.

Other information : Not available.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
Mix 1			
n-Heptane	Acute LC50 375000 µg/l Fresh water	Fish - Oreochromis mossambicus	96 hours
Mix 2			
n-Heptane	Acute LC50 375000 µg/l Fresh water	Fish - Oreochromis mossambicus	96 hours
Mix 3			
n-Heptane	Acute LC50 375000 µg/l Fresh water	Fish - Oreochromis mossambicus	96 hours
Mix 4			
n-Heptane	Acute LC50 375000 µg/l Fresh water	Fish - Oreochromis mossambicus	96 hours
Mix 5			
n-Heptane	Acute LC50 375000 µg/l Fresh water	Fish - Oreochromis mossambicus	96 hours
Mix 6			
Decane	Acute EC50 89 mg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
	Acute LC50 18000 to 24000 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 >500 ppm Marine water	Fish - Cyprinodon variegatus - Juvenile (Fledgling, Hatchling, Weanling)	96 hours
n-Heptane	Acute LC50 375000 µg/l Fresh water	Fish - Oreochromis mossambicus	96 hours

12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
Mix 1				
2,2,4-trimethylpentane	-	0 to 84 % - 8 days	-	-
Mix 2				
2,2,4-trimethylpentane	-	0 to 84 % - 8 days	-	-
Mix 3				
2,2,4-trimethylpentane	-	0 to 84 % - 8 days	-	-
Mix 4				
2,2,4-trimethylpentane	-	0 to 84 % - 8 days	-	-
Mix 6				
2,2,4-trimethylpentane	-	0 to 84 % - 8 days	-	-

SECTION 12: Ecological information

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Mix 1			
2,2,4-trimethylpentane	-	-	Inherent
Mix 2			
2,2,4-trimethylpentane	-	-	Inherent
Mix 3			
2,2,4-trimethylpentane	-	-	Inherent
Mix 4			
2,2,4-trimethylpentane	-	-	Inherent
Mix 6			
2,2,4-trimethylpentane	-	-	Inherent

12.3 Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
Mix 1			
2,2,4-trimethylpentane	4.08	231	low
n-Heptane	4.66	552	high
Mix 2			
2,2,4-trimethylpentane	4.08	231	low
n-Heptane	4.66	552	high
Mix 3			
2,2,4-trimethylpentane	4.08	231	low
n-Heptane	4.66	552	high
Mix 4			
2,2,4-trimethylpentane	4.08	231	low
n-Heptane	4.66	552	high
Mix 5			
n-Heptane	4.66	552	high
Mix 6			
Decane	5.86	-	high
n-Heptane	4.66	552	high
Octane	5.18	198.7	low
Undecane	6.42	-	high
Nonane	5.65	105	low
2,2-Dimethylbutane	3.82	-	low
2,2,4-trimethylpentane	4.08	231	low
2,4-Dimethylpentane	3.9	-	low
Pentane	3.45	171	low

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

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. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

Regulatory information

ADR/RID / IMDG / IATA : Not regulated.

Additional information : **Remarks**
De minimis quantities

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code : Not available.

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

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 : All components are listed or exempted.

Black List Chemicals : Not listed

Priority List Chemicals : Not listed

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

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

SECTION 15: Regulatory information

15.2 Chemical Safety Assessment : This product contains substances for which Chemical Safety Assessments might still be required.

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

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

Classification	Justification
Mix 1	
Flam. Liq. 2, H225	On basis of test data
Skin Irrit. 2, H315	Calculation method
STOT SE 3, H336 (Narcotic effects)	Calculation method
Asp. Tox. 1, H304	Expert judgment
Aquatic Acute 1, H400	Calculation method
Aquatic Chronic 1, H410	Calculation method
Mix 2	
Flam. Liq. 2, H225	On basis of test data
Skin Irrit. 2, H315	Calculation method
STOT SE 3, H336 (Narcotic effects)	Calculation method
Asp. Tox. 1, H304	Expert judgment
Aquatic Acute 1, H400	Calculation method
Aquatic Chronic 1, H410	Calculation method
Mix 3	
Flam. Liq. 2, H225	On basis of test data
Skin Irrit. 2, H315	Calculation method
STOT SE 3, H336 (Narcotic effects)	Calculation method
Asp. Tox. 1, H304	Expert judgment
Aquatic Chronic 2, H411	Calculation method
Mix 4	
Flam. Liq. 2, H225	On basis of test data
Asp. Tox. 1, H304	Expert judgment
Aquatic Chronic 2, H411	Calculation method
Mix 5	
Flam. Liq. 2, H225	On basis of test data
Asp. Tox. 1, H304	Expert judgment
Aquatic Chronic 3, H412	Calculation method
Mix 6	
Flam. Liq. 2, H225	On basis of test data
Acute Tox. 4, H332	Calculation method
Skin Irrit. 2, H315	Calculation method
Eye Irrit. 2, H319	Calculation method
STOT SE 3, H335 and H336 (Respiratory tract irritation and Narcotic effects)	Calculation method
Asp. Tox. 1, H304	Expert judgment
Aquatic Acute 1, H400	Calculation method
Aquatic Chronic 1, H410	Calculation method

SECTION 16: Other information

Full text of abbreviated H statements :

Mix 1

H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H336 (Narcotic effects)	May cause drowsiness or dizziness. (Narcotic effects)
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Mix 2

H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H336 (Narcotic effects)	May cause drowsiness or dizziness. (Narcotic effects)
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Mix 3

H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H336 (Narcotic effects)	May cause drowsiness or dizziness. (Narcotic effects)
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.

Mix 4

H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H336 (Narcotic effects)	May cause drowsiness or dizziness. (Narcotic effects)
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.

Mix 5

H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H336 (Narcotic effects)	May cause drowsiness or dizziness. (Narcotic effects)
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Mix 6

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332 (inhalation)	Harmful if inhaled.
H335 (Respiratory tract irritation)	May cause respiratory irritation. (Respiratory tract irritation)
H335 and H336 (Respiratory tract irritation and Narcotic effects)	May cause respiratory irritation. May cause drowsiness or dizziness. (Respiratory tract irritation and Narcotic effects)
H336 (Narcotic effects)	May cause drowsiness or dizziness. (Narcotic effects)
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.
H412	Harmful to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.

SECTION 16: Other information

Full text of classifications [CLP/GHS] :

Mix 1

Aquatic Acute 1, H400	ACUTE AQUATIC HAZARD - Category 1
Aquatic Chronic 1, H410	LONG-TERM AQUATIC HAZARD - Category 1
Asp. Tox. 1, H304	ASPIRATION HAZARD - Category 1
Flam. Liq. 2, H225	FLAMMABLE LIQUIDS - Category 2
Skin Irrit. 2, H315	SKIN CORROSION/IRRITATION - Category 2
STOT SE 3, H336 (Narcotic effects)	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3

Mix 2

Aquatic Acute 1, H400	ACUTE AQUATIC HAZARD - Category 1
Aquatic Chronic 1, H410	LONG-TERM AQUATIC HAZARD - Category 1
Asp. Tox. 1, H304	ASPIRATION HAZARD - Category 1
Flam. Liq. 2, H225	FLAMMABLE LIQUIDS - Category 2
Skin Irrit. 2, H315	SKIN CORROSION/IRRITATION - Category 2
STOT SE 3, H336 (Narcotic effects)	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3

Mix 3

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
Flam. Liq. 2, H225	FLAMMABLE LIQUIDS - Category 2
Skin Irrit. 2, H315	SKIN CORROSION/IRRITATION - Category 2
STOT SE 3, H336 (Narcotic effects)	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3

Mix 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
Flam. Liq. 2, H225	FLAMMABLE LIQUIDS - Category 2
Skin Irrit. 2, H315	SKIN CORROSION/IRRITATION - Category 2
STOT SE 3, H336 (Narcotic effects)	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3

Mix 5

Aquatic Acute 1, H400	ACUTE AQUATIC HAZARD - Category 1
Aquatic Chronic 1, H410	LONG-TERM AQUATIC HAZARD - Category 1
Aquatic Chronic 3, H412	LONG-TERM AQUATIC HAZARD - Category 3
Asp. Tox. 1, H304	ASPIRATION HAZARD - Category 1
Flam. Liq. 2, H225	FLAMMABLE LIQUIDS - Category 2
Skin Irrit. 2, H315	SKIN CORROSION/IRRITATION - Category 2
STOT SE 3, H336 (Narcotic effects)	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3

Mix 6

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
Aquatic Chronic 3, H412	LONG-TERM AQUATIC HAZARD - Category 3
Aquatic Chronic 4, H413	LONG-TERM AQUATIC HAZARD - Category 4
Asp. Tox. 1, H304	ASPIRATION HAZARD - Category 1
Eye Irrit. 2, H319	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2
Flam. Liq. 2, H225	FLAMMABLE LIQUIDS - Category 2
Flam. Liq. 3, H226	FLAMMABLE LIQUIDS - Category 3
Skin Irrit. 2, H315	SKIN CORROSION/IRRITATION - Category 2
STOT SE 3, H335 (Respiratory tract irritation)	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
STOT SE 3, H335 and H336 (Respiratory tract	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation and Narcotic

SECTION 16: Other information

	irritation and Narcotic effects)	effects) - Category 3
	STOT SE 3, H336 (Narcotic effects)	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
Full text of abbreviated R phrases :	Mix 1	R11- Highly flammable. R65- Harmful: may cause lung damage if swallowed. R38- Irritating to skin. R67- Vapours may cause drowsiness and dizziness. R50/53- Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
	Mix 2	R11- Highly flammable. R65- Harmful: may cause lung damage if swallowed. R38- Irritating to skin. R67- Vapours may cause drowsiness and dizziness. R50/53- Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
	Mix 3	R11- Highly flammable. R65- Harmful: may cause lung damage if swallowed. R38- Irritating to skin. R67- Vapours may cause drowsiness and dizziness. R50/53- Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
	Mix 4	R11- Highly flammable. R65- Harmful: may cause lung damage if swallowed. R38- Irritating to skin. R67- Vapours may cause drowsiness and dizziness. R50/53- Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
	Mix 5	R11- Highly flammable. R65- Harmful: may cause lung damage if swallowed. R38- Irritating to skin. R67- Vapours may cause drowsiness and dizziness. R50/53- Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
	Mix 6	R12- Extremely flammable. R11- Highly flammable. R10- Flammable. R20- Harmful by inhalation. R65- Harmful: may cause lung damage if swallowed. R38- Irritating to skin. R36/37/38- Irritating to eyes, respiratory system and skin. R66- Repeated exposure may cause skin dryness or cracking. R67- Vapours may cause drowsiness and dizziness. R50/53- Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Full text of classifications [DSD/DPD] :	Mix 1	F - Highly flammable Xn - Harmful Xi - Irritant N - Dangerous for the environment
	Mix 2	F - Highly flammable Xn - Harmful Xi - Irritant N - Dangerous for the environment
	Mix 3	F - Highly flammable Xn - Harmful Xi - Irritant

SECTION 16: Other information

	N - Dangerous for the environment
Mix 4	F - Highly flammable Xn - Harmful Xi - Irritant N - Dangerous for the environment
Mix 5	F - Highly flammable Xn - Harmful Xi - Irritant N - Dangerous for the environment
Mix 6	F+ - Extremely flammable F - Highly flammable Xn - Harmful Xi - Irritant N - Dangerous for the environment

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