

# SAFETY DATA SHEET

according to Regulation (EC) No. 453/2010

# LOW SOLIDS XP-07-CF CaBr2

Revision Date: 09-Dec-2015

Revision Number: 1

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

1.1. Product Identifier	
Product Name	LOW SOLIDS XP-07-CF CaBr2
Internal ID Code	HM008222

1.2. Relevant identified uses of the substance or mixture and uses advised againstRecommended UseDrilling Fluid

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

Halliburton Manufacturing Services, Ltd. Halliburton House, Howemoss Crescent Kirkhill Industrial Estate Dyce Aberdeen, AB21 0GN United Kingdom

www.halliburton.com <u>For further information, please contact</u> **E-Mail address:** <u>1.4. Emergency telephone number</u> +44 8 08 189 0979 / 1-760-476-3961

Emergency telephone - §4	45 - (EC)1272/2008
Europe	112
Croatia	Centar za kontrolu otrovanja (CKO): (+385 1) 23-48-342 (Poison Control Center (PCC) - Institute for Medical Research and Occupational Health)
Cyprus	+210 7793777
Denmark	Poison Control Hotline (DK): +45 82 12 12 12
France	ORFILA (FR): + 01 45 42 59 59
Germany	Poison Center Berlin (DE): +49 030 30686 790
Italy	Poison Center, Milan (IT): +39 02 6610 1029
Netherlands	National Poisons Information Center (NL): +31 30 274 88 88 (NB: this service is only available to health professionals)
Norway	Poisons Information (NO):+ 47 22 591300
Poland	Poison Control and Information Centre, Warsaw (PL): +48 22 619 66 54; +48 22 619 08 97
Romania	+40 21 318 36 06
Spain	Poison Information Service (ES): +34 91 562 04 20
United Kingdom	NHS Direct (UK): +44 0845 46 47

# SECTION 2: Hazards Identification

## 2.1. Classification of the substance or mixture

## REGULATION (EC) No 1272/2008

Aspiration Category	Category 1 - H304
Serious Eye Damage / Eye Irritation	Category 2 - H319
Specific Target Organ Toxicity - (Repeated Exposure)	Category 2 - H373

## 2.2. Label Elements

## Hazard Pictograms



Signal Word

Danger

## Hazard Statements

H304 - May be fatal if swallowed and enters airways

# H318 - Causes serious eye damage

H373 - May cause damage to organs through prolonged or repeated exposure

## Precautionary Statements - EU (§28, 1272/2008)

P260 - Do not breathe dust/fume/gas/mist/vapors/spray

P264 - Wash face, hands and any exposed skin thoroughly after handling

P280 - Wear eye protection/face protection

P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

P331 - Do NOT induce vomiting

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P310 - Immediately call a POISON CENTER or doctor/physician

P363 - Wash contaminated clothing before reuse

P314 - Get medical attention/advice if you feel unwell

P501 - Dispose of contents/container in accordance with local/regional/national/international regulations

#### Contains Substances

Substances Cesium formate Calcium bromide Paraffin, petroleum, normal C5-C20 Poly(oxy-1,2-ethanediyl), a-(carboxymethyl)-w-[(9Z)-9-octadecenyloxy]- **CAS Number** 3495-36-1 7789-41-5 64771-72-8 57635-48-0

## 2.3. Other Hazards

None known

# **SECTION 3: Composition/information on Ingredients**

Substances	EINECS	CAS Number	PERCENT (w/w)	EU - CLP Substance Classification	REACH No.
Cesium formate	222-492-8	3495-36-1	10 - 30%	Acute Tox. 4 (H302) Eye Irrit. 2 (H319) STOT RE 2 (H373)	No data available
Calcium bromide	232-164-6	7789-41-5	10 - 30%	Eye Corr. 1 (H318)	01-2119490040-51
Paraffin, petroleum, normal C5-C20	265-233-4	64771-72-8	10 - 30%	Asp. Tox. 1 (H304) (EUH066)	No data available
Poly(oxy-1,2-ethanediyl), a-(carboxymethyl)-w-[(9Z)-9 -octadecenyloxy]-	611-563-2	57635-48-0	1 - 5%	Skin Irrit. 2 (H315) Eye Corr. 1 (H318)	No data available

For the full text of the H-phrases mentioned in this Section, see Section 16

# **SECTION 4: First aid measures**

## 4.1. Description of first aid measures

Inhalation

If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult.

Immediately flush eyes with large amounts of water for at least 30 minutes.

Eyes

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	Seek prompt medical attention. Check for and remove contact lenses if present.
Skin	Wash with soap and water. Get medical attention if irritation persists.
Ingestion	Do NOT induce vomiting. Give nothing by mouth. Obtain immediate medical
	attention.

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

Aspiration into the lungs may cause chemical pneumonitis including coughing, difficulty breathing, wheezing, coughing up blood and pneumonia, which can be fatal. Prolonged or repeated exposure may cause damage to organs. May cause allergic skin reaction. Causes serious eye damage. Causes severe eye irritation which may damage tissue.

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

Notes to Physician Treat symptomatically

# **SECTION 5: Firefighting Measures**

5.1. Extinguishing media Suitable Extinguishing Media All standard fire fighting media Extinguishing media which must not be used for safety reasons None known.

5.2. Special hazards arising from the substance or mixture

Special Exposure Hazards

Decomposition in fire may produce harmful gases.

## 5.3. Advice for firefighters

**Special Protective Equipment for Fire-Fighters** 

Full protective clothing and approved self-contained breathing apparatus required for fire fighting personnel.

# **SECTION 6: Accidental release measures**

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

Use appropriate protective equipment. See Section 8 for additional information

## 6.2. Environmental precautions

Prevent from entering sewers, waterways, or low areas.

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

Isolate spill and stop leak where safe. Contain spill with sand or other inert materials. Scoop up and remove.

## 6.4. Reference to other sections

See Section 8 and 13 for additional information.

**SECTION 7: Handling and Storage** 

#### 7.1. Precautions for Safe Handling

Avoid contact with eyes, skin, or clothing. Avoid breathing mist. **Hygiene Measures** 

Handle in accordance with good industrial hygiene and safety practice.

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

Store in a cool well ventilated area. Keep container closed when not in use.

#### 7.3. Specific End Use(s) Exposure Scenario

Other Guidelines

No information available No information available

# **SECTION 8: Exposure Controls/Personal Protection**

## 8.1. Control parameters

	Exposure	Limits
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Substances	CAS Number	EU	UK	Netherlands	France
Cesium formate	3495-36-1	Not applicable	Not applicable	Not applicable	Not applicable
Calcium bromide	7789-41-5	Not applicable	10 mg/m <sup>3</sup>	Not applicable	Not applicable

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Paraffin, petroleum, normal 64 C5-C20	4771-72-8	Not applicable	Not applicable	Not applicable	Not applicable
Poly(oxy-1,2-ethanediyl), 57 a-(carboxymethyl)-w-[(9Z)-9 -octadecenyloxy]-	7635-48-0	Not applicable	Not applicable	Not applicable	Not applicable

Substances	CAS Number	Germany	Spain	Portugal	Finland
Cesium formate	3495-36-1	Not applicable	Not applicable	Not applicable	Not applicable
Calcium bromide	7789-41-5	Not applicable	Not applicable	Not applicable	Not applicable
Paraffin, petroleum, normal C5-C20	64771-72-8	Not applicable	Not applicable	Not applicable	Not applicable
Poly(oxy-1,2-ethanediyl), a-(carboxymethyl)-w-[(9Z)-9 -octadecenyloxy]-	57635-48-0	Not applicable	Not applicable	Not applicable	Not applicable

Substances	CAS Number	Austria	Ireland	Switzerland	Norway
Cesium formate	3495-36-1	Not applicable	Not applicable	Not applicable	Not applicable
Calcium bromide	7789-41-5	Not applicable	Not applicable	Not applicable	Not applicable
Paraffin, petroleum, normal C5-C20	64771-72-8	Not applicable	Not applicable	Not applicable	Not applicable
Poly(oxy-1,2-ethanediyl), a-(carboxymethyl)-w-[(9Z)-9 -octadecenyloxy]-	57635-48-0	Not applicable	Not applicable	Not applicable	Not applicable

Substances	CAS Number	Italy	Poland	Hungary	Czech Republic
Cesium formate	3495-36-1	Not applicable	Not applicable	Not applicable	Not applicable
Calcium bromide	7789-41-5	Not applicable	Not applicable	Not applicable	Not applicable
Paraffin, petroleum, normal C5-C20	64771-72-8	Not applicable	Not applicable	Not applicable	Not applicable
Poly(oxy-1,2-ethanediyl), a-(carboxymethyl)-w-[(9Z)-9 -octadecenyloxy]-	57635-48-0	Not applicable	Not applicable	Not applicable	Not applicable

Substances	CAS Number	Denmark	Romania	Croatia	Cyprus
Cesium formate	3495-36-1	Not applicable	Not applicable	Not applicable	Not applicable
Calcium bromide	7789-41-5	Not applicable	Not applicable	Not applicable	Not applicable
Paraffin, petroleum, normal C5-C20	64771-72-8	Not applicable	Not applicable	Not applicable	Not applicable
Poly(oxy-1,2-ethanediyl), a-(carboxymethyl)-w-[(9Z)-9 -octadecenyloxy]-	57635-48-0	Not applicable	Not applicable	Not applicable	Not applicable

# Derived No Effect Level (DNEL) Worker

## No information available.

Substances	Long-term	Acute / short	Long-term	Acute / short	Long-term	Acute / short	Long-term	Acute / short	Hazards for
	exposure -	term	exposure -	term	exposure -	term	exposure -	term	the eyes -
	systemic	exposure -	local effects,	exposure -	systemic	exposure -	local effects,	exposure -	local effects
	effects,	systemic	Inhalation	local effects,	effects,	systemic	Dermal	local effects,	
	Inhalation	effects,		Inhalation	Dermal	effects,		Dermal	
		Inhalation				Dermal			
Calcium bromide	1.4 mg/m <sup>3</sup>	Not available	Not available	500 mg/m³	0.2 mg/kg	Not available	Not available	Not available	Not available
				Ĵ	bw/d				

## **General Population**

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Substances	Long-term	Acute /	Long-term	Acute /	Long-term	Acute /	Long-term	Acute /	Long-term	Acute /	Hazards
	exposure -	short term	exposure -	short term	exposure -	short term	exposure -	short term	exposure -	short term	for the
	systemic	exposure -	local	exposure -	systemic	exposure -	local	exposure -	systemic	exposure -	eyes -
	effects,	systemic	effects,	local	effects,	systemic	effects,	local	effects,	local	local
	Inhalation	effects,	Inhalation	effects,	Dermal	effects,	Dermal	effects,	Oral	effects,	effects
		Inhalation		Inhalation		Dermal		Dermal		Oral	
Calcium bromide	0.25	Not	Not	Not	0.073	Not	Not	Not	0.073	Not	Not
	mg/m <sup>3</sup>	available	available	available	mg/kg	available	available	available	mg/kg	available	available
	-				bw/d				bw/d		

# Predicted No Effect Concentration (PNEC)

Predicted No Ef	redicted No Effect Concentration (PNEC)			No information available.					
Substances	Freshwater	Marine water	Intermittent	Sewage	Sediment	Sediment	Air	Soil	Secondary
			release	treatment	(freshwater)	(marine			poisoning
				plant		water)			
Calcium bromide	0.117 mg/L	0.058 mg/L	0.208 mg/L	77.7 mg/L	0.433 mg/kg	0.215 mg/kg	Not available	0.2 mg/kg	No potential
	-		_	-	sediment dw	sediment dw		soil dw	for
									bioaccumulat

ion	 	 	 	 	 
					ion

# 8.2. Exposure controls Engineering Controls Use in a well ventilated area. Personal protective equipment If engineering controls and work practices cannot prevent excessive exposures, the selection and proper use of personal protective equipment should be determined by an industrial hygienist or other qualified professional based on the specific application of this product. Respiratory Protection If engineering controls and work practices cannot keep exposure below occupational exposure limits or if exposure is unknown, wear a NIOSH certified, European Standard EN 149, AS/NZS 1715:2009, or equivalent respirator when using this product. Selection

	of and instruction on using all personal protective equipment, including respirators,
	should be performed by an Industrial Hygienist or other qualified professional.
	Not normally needed. But if significant exposures are possible then the following
	respirator is recommended:
	Dust/mist respirator. (N95, P2/P3)
Hand Protection	Impervious rubber gloves. Neoprene gloves. Nitrile gloves. Polyvinylchloride gloves.
Skin Protection	Rubber apron.
Eye Protection	Chemical goggles; also wear a face shield if splashing hazard exists.
Other Precautions	Eyewash fountains and safety showers must be easily accessible.

Environmental Exposure Controls No information available

# **SECTION 9: Physical and Chemical Properties**

# 9.1. Information on basic physical and chemical properties

Physical State: Liquid	Color:	Off white to Brown
Odor: Hydrocarbon	Odor Threshold:	No information available
Property	Values	
Remarks/ - Method		
pH:	No data available	
Freezing Point/Range	No data available	
Melting Point/Range	No data available	
Boiling Point/Range	No data available	
Flash Point	No data available	
Flammability (solid, gas)	No data available	
upper flammability limit	No data available	
lower flammability limit	No data available	
Evaporation rate	No data available	
Vapor Pressure	No data available	
Vapor Density	No data available	
Specific Gravity	1.1-1.6	
Water Solubility	Insoluble in water	
Solubility in other solvents	No data available	
Partition coefficient: n-octanol/water	No data available	
Autoignition Temperature	No data available	
Decomposition Temperature	No data available	
Viscosity	No data available	
Explosive Properties	No information ava	ailable
Oxidizing Properties	No information ava	ailable

9.2. Other information VOC Content (%)

No data available

# **SECTION 10: Stability and Reactivity**

 10.1. Reactivity

 Not expected to be reactive.

 10.2. Chemical Stability

 Stable

 10.3. Possibility of Hazardous Reactions

 Will Not Occur

 10.4. Conditions to Avoid

 None anticipated

 10.5. Incompatible Materials

# Strong oxidizers.

# 10.6. Hazardous Decomposition Products

Carbon monoxide and carbon dioxide. Aldehydes. Formic acid. Bromine. Oxides of nitrogen.

# **SECTION 11: Toxicological Information**

# 11.1. Information on Toxicological Effects

Inhalation	May cause respiratory irritation.
Eye Contact	Causes serious eye damage
Skin Contact	May cause mild skin irritation.
Ingestion	May be harmful if swallowed. Aspiration can be a hazard if this material is swallowed.
Chronic Effects/Carcinogenicity	No data available to indicate product or components present at greater than 0.1% are chronic health hazards.

## Toxicology data for the components

Substances	CAS Number	LD50 Oral	LD50 Dermal	LC50 Inhalation
Cesium formate	3495-36-1	1780 mg/kg (Rat) 2000 mg/kg (Rat)	2000 mg/kg (Rat)	No data available
Calcium bromide	7789-41-5	2447 mg/kg (Rat) 2210 mg/kg (Rat)	>2000 mg/kg (Rabbit)	<ul> <li>&gt; 203 mg/L (Rat, aerosol, 1h)</li> <li>&gt; 204 mg/L (Rat, dust, 1h)</li> </ul>
Paraffin, petroleum, normal C5-C20	64771-72-8	> 5000 mg/kg (Rat)	> 2000 mg.kg (Rabbit) (similar substance)	>1369 ppm (Rat, 8h, saturated) (similar substance)
Poly(oxy-1,2-ethanediyl), a-(carboxymethyl)-w-[(9Z)-9 -octadecenyloxy]-	57635-48-0	> 2000 mg/kg (Rat)	> 10000 mg/kg (Rabbit) (similar substance)	No data available

ousoluniooo	CAS Number	Skin corrosion/irritation
Cesium formate	3495-36-1	Non-irritating to the skin (Rabbit)
Calcium bromide	7789-41-5	Non-irritating to the skin (Rabbit)
Paraffin, petroleum, normal C5-C20	64771-72-8	Not irritating to skin in rabbits.
Poly(oxy-1,2-ethanediyl), a-(carboxymethyl)-w-[(9Z)-9 -octadecenyloxy]-		Causes skin irritation.

	CAS Number	Eye damage/irritation
Cesium formate	3495-36-1	Irritating to eyes. (Rabbit)
Calcium bromide	7789-41-5	Causes severe eye irritation. (Rabbit)
Paraffin, petroleum, normal C5-C20	64771-72-8	Non-irritating to rabbit's eye (similar substances)
Poly(oxy-1,2-ethanediyl), a-(carboxymethyl)-w-[(9Z)-9 -octadecenyloxy]-		Corrosive to eyes

Substances	CAS	Skin Sensitization
	Number	
Cesium formate	3495-36-1	Did not cause sensitization on laboratory animals (mouse)
Calcium bromide	7789-41-5	Did not cause sensitization on laboratory animals (guinea pig)
Paraffin, petroleum, normal	64771-72-8	Did not cause sensitization on laboratory animals (guinea pig) Patch test on human volunteers did
C5-C20		not demonstrate irritating properties
Poly(oxy-1,2-ethanediyl),	57635-48-0	Did not cause sensitization on laboratory animals (similar substances)
a-(carboxymethyl)-w-[(9Z)-9		
-octadecenyloxy]-		

Substances	CAS Number	Respiratory Sensitization
Cesium formate	3495-36-1	No information available
Calcium bromide	7789-41-5	No information available
Paraffin, petroleum, normal C5-C20	64771-72-8	No information available
Poly(oxy-1,2-ethanediyl), a-(carboxymethyl)-w-[(9Z)-9 -octadecenyloxy]-		No information available

Substances	CAS	Mutagenic Effects

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	Number	
Cesium formate	3495-36-1	In vitro tests did not show mutagenic effects In vivo tests did not show mutagenic effects.
Calcium bromide	7789-41-5	In vitro tests did not show mutagenic effects
Paraffin, petroleum, normal	64771-72-8	In vitro tests did not show mutagenic effects In vivo tests did not show mutagenic effects.
C5-C20		
Poly(oxy-1,2-ethanediyl),	57635-48-0	In vitro tests did not show mutagenic effects. In vivo tests did not show mutagenic effects. (similar
a-(carboxymethyl)-w-[(9Z)-9		substances)
-octadecenyloxy]-		

Substances	CAS Number	Carcinogenic Effects
Cesium formate	3495-36-1	No information available.
Calcium bromide	7789-41-5	Did not show carcinogenic effects in animal experiments (similar substances)
Paraffin, petroleum, normal C5-C20	64771-72-8	Not regarded as carcinogenic. (similar substances)
Poly(oxy-1,2-ethanediyl), a-(carboxymethyl)-w-[(9Z)-9 -octadecenyloxy]-		No information available.

Substances	CAS Number	Reproductive toxicity	
Cesium formate	3495-36-1	Animal testing did not show any effects on fertility. Did not show teratogenic effects in animal experiments. (similar substances)	
Calcium bromide	7789-41-5	Animal testing did not show any effects on fertility. Adverse developmental effects were only observed at maternally toxic doses. (similar substances)	
Paraffin, petroleum, normal C5-C20	64771-72-8	Animal testing did not show any effects on fertility. Did not show teratogenic effects in animal experiments. (similar substances)	
Poly(oxy-1,2-ethanediyl), a-(carboxymethyl)-w-[(9Z)-9 -octadecenyloxy]-	57635-48-0	No data of sufficient quality are available.	

	CAS Number	STOT - single exposure
Cesium formate	3495-36-1	No data of sufficient quality are available.
Calcium bromide	7789-41-5	No significant toxicity observed in animal studies at concentration requiring classification.
Paraffin, petroleum, normal C5-C20	64771-72-8	No significant toxicity observed in animal studies at concentration requiring classification.
Poly(oxy-1,2-ethanediyl), a-(carboxymethyl)-w-[(9Z)-9 -octadecenyloxy]-		No information available

	CAS Number	STOT - repeated exposure
Cesium formate	3495-36-1	Causes damage to organs through prolonged or repeated exposure: Heart (Blood) Central Nervous System (CNS)
Calcium bromide	7789-41-5	No information available
Paraffin, petroleum, normal C5-C20	64771-72-8	No significant toxicity observed in animal studies at concentration requiring classification. (similar substances)
Poly(oxy-1,2-ethanediyl), a-(carboxymethyl)-w-[(9Z)-9 -octadecenyloxy]-	57635-48-0	No significant toxicity observed in animal studies at concentration requiring classification. (similar substances)

		Aspiration hazard
	Number	
Cesium formate	3495-36-1	Not applicable
Calcium bromide	7789-41-5	Not applicable
Paraffin, petroleum, normal	64771-72-8	Aspiration into the lungs may cause chemical pneumonitis including coughing, difficulty breathing,
C5-C20		wheezing, coughing up blood and pneumonia, which can be fatal.
Poly(oxy-1,2-ethanediyl),	57635-48-0	Not applicable
a-(carboxymethyl)-w-[(9Z)-9		
-octadecenyloxy]-		

# **SECTION 12: Ecological Information**

# 12.1. Toxicity Ecotoxicity Effects

Substances	CAS	Toxicity to Algae	Toxicity to Fish	Toxicity to	Toxicity to

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	Number			Microorganisms	Invertebrates
Cesium formate	3495-36-1	EC50 (72h) 33 mg/L (Selenastrum capricornutum)	LC50 (96h) > 100 mg/L (Danio rerio)	No information available	EC50 (48hr) 35 mg/L (Daphnia magna)
Calcium bromide	7789-41-5	EC50 (48h) > 440 mg/L (Growth rate) (Skeletonema costatum) (similar substance)	LC50 (96h) > 440 mg/L (Scophthalmus maximus) (similar substance) LC50 (96h) > 1000 mg/L (Lepomis macrochirus) (similar substance) NOEC (124d) 10 mg/L (Poecelia reticulata) (similar substance)	EC50 (3h) > 1000 mg/L (activated sludge, domestic) (similar substance)	EC50 (48h) > 100 mg/L (Daphnia magna) NOEC (21d) 7.5 mg/L (Reproduction) (Daphnia magna) (similar substance)
Paraffin, petroleum, normal C5-C20	64771-72-8	EC50 (72h) 6935.35 mg/L (Skeletonema costatum)	LC50 (96h) > 5000 mg/L (Pimephales promelas) LC50 (96h) > 1000 mg/L (Scophthalmus maximus)	No information available	EL50 (48h) > 1000 mg/L (Daphnia Magna) LC50 (48h) > 1000 mg/L (Acartia tonsa)
Poly(oxy-1,2-ethanediyl), a-(carboxymethyl)-w-[(92 )-9-octadecenyloxy]-		EC50 (72h): 25.21 mg/L (Skeletonema costatum)	EC50 (96h): 29.25 mg/L (Scopthalmus maximus) NOEC(10d): 416.78 mg/kg (Corophium volutator)	No information available	EC50 (48h): 597.37 mg/L (Acartia tonsa)

# 12.2. Persistence and degradability

Substances	CAS Number	Persistence and Degradability
Cesium formate	3495-36-1	(66% @ 28d)
Calcium bromide	7789-41-5	The methods for determining biodegradability are
		not applicable to inorganic substances.
Paraffin, petroleum, normal C5-C20	64771-72-8	Readily biodegradable (74% @ 28d)
Poly(oxy-1,2-ethanediyl),	57635-48-0	Readily biodegradable (83% @ 28d)
a-(carboxymethyl)-w-[(9Z)-9-octadecenyloxy]-		

## 12.3. Bioaccumulative potential

Substances	CAS Number	Log Pow
Cesium formate	3495-36-1	< -2.20
Calcium bromide	7789-41-5	No information available
Paraffin, petroleum, normal C5-C20	64771-72-8	> 6
Poly(oxy-1,2-ethanediyl),	57635-48-0	4.91
a-(carboxymethyl)-w-[(9Z)-9-octadecenyloxy]-		

# 12.4. Mobility in soil

Substances	CAS Number	Mobility
Cesium formate	3495-36-1	No information available
Calcium bromide	7789-41-5	No information available
Paraffin, petroleum, normal C5-C20	64771-72-8	No information available
Poly(oxy-1,2-ethanediyl),	57635-48-0	No information available
a-(carboxymethyl)-w-[(9Z)-9-octadecenyloxy]-		

## 12.5. Results of PBT and vPvB assessment

No information available.	
Substances	PBT and vPvB assessment
Cesium formate	Not PBT/vPvB
Calcium bromide	Not applicable
Paraffin, petroleum, normal C5-C20	Not PBT/vPvB
Poly(oxy-1,2-ethanediyl),	Not PBT/vPvB
a-(carboxymethyl)-w-[(9Z)-9-octadecenyloxy]-	

## 12.6. Other adverse effects

# Endocrine Disruptor Information

This product does not contain any known or suspected endocrine disruptors

# **SECTION 13: Disposal Considerations**

#### 13.1. Waste treatment methods Disposal Method Contaminated Packaging

Disposal should be made in accordance with federal, state, and local regulations. Follow all applicable national or local regulations.

# **SECTION 14: Transport Information**

IMDG/IMO UN Number: UN Proper Shipping Name: Transport Hazard Class(es): Packing Group: Environmental Hazards:	Not restricted Not restricted Not applicable Not applicable Not applicable
<u>RID</u> UN Number: UN Proper Shipping Name: Transport Hazard Class(es): Packing Group: Environmental Hazards:	Not restricted Not restricted Not applicable Not applicable Not applicable
ADR UN Number: UN Proper Shipping Name: Transport Hazard Class(es): Packing Group: Environmental Hazards:	Not restricted Not restricted Not applicable Not applicable Not applicable
IATA/ICAO UN Number: UN Proper Shipping Name: Transport Hazard Class(es): Packing Group: Environmental Hazards:	Not restricted Not restricted Not applicable Not applicable Not applicable
14.1. UN Number:	Not restricted
14.2. UN Proper Shipping Name:	Not restricted
14.3. Transport Hazard Class(es):	Not applicable
14.4. Packing Group:	Not applicable
14.5. Environmental Hazards:	Not applicable

## 14.6. Special Precautions for User: None

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

# SECTION 15: Regulatory Information

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

International Inventories	
EINECS Inventory	This product, and all its components, complies with EINECS
US TSCA Inventory	All components listed on inventory or are exempt.
Canadian DSL Inventory	Product contains one or more components not listed on the inventory.
-	

## Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

Germany, Water Endangering Classes (WGK) WGK 1: Low hazard to waters.

#### 15.2. Chemical Safety Assessment No information available

# **SECTION 16: Other Information**

# Full text of H-Statements referred to under sections 2 and 3 None

## Key or legend to abbreviations and acronyms

bw - body weight CAS - Chemical Abstracts Service CLP - REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on Classification, Labelling and Packaging of substances and mixtures EC - European Commission EC10 – Effective Concentration 10% EC50 - Effective Concentration 50% EEC - European Economic Community ErC50 – Effective Concentration growth rate 50% IBC Code - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk LC50 – Lethal Concentration 50% LD50 – Lethal Dose 50% LL0 – Lethal Loading 0% LL50 – Lethal Loading 50% MARPOL - International Convention for the Prevention of Pollution from Ships mg/kg - milligram/kilogram mg/L - milligram/liter NIOSH - National Institute for Occupational Safety and Health NOEC - No Observed Effect Concentration NTP - National Toxicology Program OEL – Occupational Exposure Limit PBT - Persistent Bioaccumulative and Toxic PC – Chemical Product category PEL – Permissible Exposure Limit ppm - parts per million PROC - Process category REACH - REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals STEL - Short Term Exposure Limit SU - Sector of Use category

## Key literature references and sources for data

www.ChemADVISOR.com/

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## This safety data sheet complies with the requirements of Regulation (EC) No. 453/2010

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## End of Safety Data Sheet