

## SAFETY DATA SHEET

according to Regulation (EC) No. 453/2010

### OBM RECLASS LOW SOLIDS XP-07

Revision Date: 24-Sep-2015

Revision Number: 2

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

##### 1.1. Product Identifier

Product Name OBM RECLASS LOW SOLIDS XP-07  
Internal ID Code HM008141

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

Recommended Use Mud System

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

Halliburton Energy Services  
Halliburton House, Howemoss Place  
Kirkhill Industrial Estate  
Dyce  
Aberdeen, AB21 0GN  
United Kingdom

[www.halliburton.com](http://www.halliburton.com)

For further information, please contact

E-Mail address: [fdunexchem@halliburton.com](mailto:fdunexchem@halliburton.com)

##### 1.4. Emergency telephone number

+44 8 08 189 0979 / 1-760-476-3961

Emergency telephone - §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
Skin Sensitization	Category 1 - H317

##### 2.2. Label Elements

Hazard Pictograms

**Signal Word****Danger****Hazard Statements**

H304 - May be fatal if swallowed and enters airways

H317 - May cause an allergic skin reaction

H319 - Causes serious eye irritation

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

P280 - Wear protective gloves/protective clothing/eye protection/face protection

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

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention

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

**Contains****Substances**

Paraffin, petroleum, normal C5-C20

Paraffins, petroleum, normal C&gt;10

Calcium chloride

Fatty acid, tall-oil, reaction product with diethylenetriamine, maleic anhydride, tetraethylenepentamine, and triethylenetetramine

**CAS Number**

64771-72-8

64771-71-7

10043-52-4

68990-47-6

**2.3. Other Hazards**

Repeated exposure may cause skin dryness or cracking

<b>SECTION 3: Composition/information on Ingredients</b>
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Substances	EINECS	CAS Number	PERCENT (w/w)	EU - CLP Substance Classification	REACH No.
Paraffin, petroleum, normal C5-C20	265-233-4	64771-72-8	10 - 30%	Asp. Tox. 1 (H304) (EUH066)	No data available
Paraffins, petroleum, normal C>10	265-232-9	64771-71-7	10 - 30%	Asp. Tox. 1 (H304)	No data available
Calcium chloride	233-140-8	10043-52-4	1 - 5%	Eye Irrit. 2A (H319)	01-2119494219-28
Fatty acid, tall-oil, reaction product with diethylenetriamine, maleic anhydride, tetraethylenepentamine, and triethylenetetramine	273-601-0	68990-47-6	1 - 5%	Skin Sens. 1 (H317)	01-2119496070-42

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

<b>SECTION 4: First aid measures</b>
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**4.1. Description of first aid measures****Inhalation**

If inhaled, move victim to fresh air and seek medical attention.

**Eyes**

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.

**Skin**

Wash with soap and water. Get medical attention if irritation persists. Remove contaminated clothing and launder before reuse.

<b>Ingestion</b>	Get medical attention! If vomiting occurs, keep head lower than hips to prevent aspiration. Rinse mouth. Never give anything by mouth to an unconscious person.
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**4.2. Most Important symptoms and effects, both acute and delayed**

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

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

<b>Notes to Physician</b>	Treat symptomatically
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**SECTION 5: Firefighting Measures****5.1. Extinguishing media****Suitable Extinguishing Media**

Water fog, carbon dioxide, foam, dry chemical.

**Extinguishing media which must not be used for safety reasons**

Do NOT spray pool fires directly with water. A solid stream of water directed into hot burning liquid can cause splattering.

**5.2. Special hazards arising from the substance or mixture****Special Exposure Hazards**

Use water spray to cool fire exposed surfaces. Closed containers may explode in fire. 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. Wear self-contained breathing apparatus in enclosed areas.

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. Remove ignition sources and work with non-sparking tools. 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 vapors. Avoid breathing mist. Wash hands after use. Launder contaminated clothing before reuse. Material is slippery underfoot. Ground and bond containers when transferring from one container to another.

**Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice.

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

Store away from oxidizers. Keep from heat, sparks, and open flames. Keep container closed when not in use.

**7.3. Specific End Use(s)**

<b>Exposure Scenario</b>	No information available
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<b>Other Guidelines</b>	No information available
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**SECTION 8: Exposure Controls/Personal Protection****8.1. Control parameters****Exposure Limits**

Substances	CAS Number	EU	UK	Netherlands	France
Paraffin, petroleum, normal C5-C20	64771-72-8	Not applicable	Not applicable	Not applicable	Not applicable
Paraffins, petroleum, normal C>10	64771-71-7	Not applicable	Not applicable	Not applicable	Not applicable
Calcium chloride	10043-52-4	Not applicable	10 mg/m <sup>3</sup>	Not applicable	Not applicable
Fatty acid, tall-oil, reaction product with diethylenetriamine, maleic anhydride, tetraethylenepentamine, and triethylenetetramine	68990-47-6	Not applicable	Not applicable	Not applicable	Not applicable

Substances	CAS Number	Germany	Spain	Portugal	Finland
Paraffin, petroleum, normal C5-C20	64771-72-8	Not applicable	Not applicable	Not applicable	Not applicable
Paraffins, petroleum, normal C>10	64771-71-7	Not applicable	Not applicable	Not applicable	Not applicable
Calcium chloride	10043-52-4	Not applicable	Not applicable	Not applicable	Not applicable
Fatty acid, tall-oil, reaction product with diethylenetriamine, maleic anhydride, tetraethylenepentamine, and triethylenetetramine	68990-47-6	Not applicable	Not applicable	Not applicable	Not applicable

Substances	CAS Number	Austria	Ireland	Switzerland	Norway
Paraffin, petroleum, normal C5-C20	64771-72-8	Not applicable	Not applicable	Not applicable	Not applicable
Paraffins, petroleum, normal C>10	64771-71-7	Not applicable	Not applicable	Not applicable	Not applicable
Calcium chloride	10043-52-4	Not applicable	Not applicable	Not applicable	Not applicable
Fatty acid, tall-oil, reaction product with diethylenetriamine, maleic anhydride, tetraethylenepentamine, and triethylenetetramine	68990-47-6	Not applicable	Not applicable	Not applicable	Not applicable

Substances	CAS Number	Italy	Poland	Hungary	Czech Republic
Paraffin, petroleum, normal C5-C20	64771-72-8	Not applicable	Not applicable	Not applicable	Not applicable
Paraffins, petroleum, normal C>10	64771-71-7	Not applicable	Not applicable	Not applicable	Not applicable
Calcium chloride	10043-52-4	Not applicable	Not applicable	Not applicable	TWA: 5 mg/m <sup>3</sup>
Fatty acid, tall-oil, reaction product with diethylenetriamine, maleic anhydride, tetraethylenepentamine, and triethylenetetramine	68990-47-6	Not applicable	Not applicable	Not applicable	Not applicable

Substances	CAS Number	Denmark	Romania	Croatia	Cyprus
Paraffin, petroleum, normal C5-C20	64771-72-8	Not applicable	Not applicable	Not applicable	Not applicable
Paraffins, petroleum, normal C>10	64771-71-7	Not applicable	Not applicable	Not applicable	Not applicable
Calcium chloride	10043-52-4	Not applicable	Not applicable	Not applicable	Not applicable
Fatty acid, tall-oil, reaction product with diethylenetriamine, maleic anhydride, tetraethylenepentamine, and triethylenetetramine	68990-47-6	Not applicable	Not applicable	Not applicable	Not applicable

**Derived No Effect Level (DNEL)**

No information available.

**Worker**

Substances	Long-term exposure - systemic effects, Inhalation	Acute / short term exposure - systemic effects,	Long-term exposure - local effects, Inhalation	Acute / short term exposure - local effects, Inhalation	Long-term exposure - systemic effects, Dermal	Acute / short term exposure - systemic effects,	Long-term exposure - local effects, Dermal	Acute / short term exposure - local effects, Dermal	Hazards for the eyes - local effects

		Inhalation				Dermal			
Calcium chloride	Not available	Not available	5 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>	Not available	Not available	Not available	Not available	Not available
Fatty acid, tall-oil, reaction product with diethylenetriamine, maleic anhydride, tetraethylenepentamine, and triethylenetetramine	14693 µg/m <sup>3</sup>	29386 µg/m <sup>3</sup>	14693 µg/m <sup>3</sup>	14693 µg/m <sup>3</sup>	16666 µg/kg bw/day	33332 µg/kg bw/day	1388 µg/cm <sup>2</sup>	1388 µg/cm <sup>2</sup>	Not available

**General Population**

Substances	Long-term exposure - systemic effects, Inhalation	Acute / short term exposure - systemic effects, Inhalation	Long-term exposure - local effects, Inhalation	Acute / short term exposure - local effects, Inhalation	Long-term exposure - systemic effects, Dermal	Acute / short term exposure - systemic effects, Dermal	Long-term exposure - local effects, Dermal	Acute / short term exposure - local effects, Dermal	Long-term exposure - systemic effects, Oral	Acute / short term exposure - local effects, Oral	Hazards for the eyes - local effects
Calcium chloride	Not available	Not available	2.5 mg/m <sup>3</sup>	5 mg/m <sup>3</sup>	Not available	Not available	Not available	Not available	Not available	Not available	Not available
Fatty acid, tall-oil, reaction product with diethylenetriamine, maleic anhydride, tetraethylenepentamine, and triethylenetetramine	3623 µg/m <sup>3</sup>	7246 µg/m <sup>3</sup>	3623 µg/m <sup>3</sup>	3623 µg/m <sup>3</sup>	8333 µg/kg bw/day	16666 µg/kg bw/day	694 µg/cm <sup>2</sup>	694 µg/cm <sup>2</sup>	8333 µg/kg bw/day	16666 µg/kg bw/day	Not available

**Predicted No Effect Concentration (PNEC)**

No information available.

Substances	Freshwater	Marine water	Intermittent release	Sewage treatment plant	Sediment (freshwater)	Sediment (marine water)	Air	Soil	Secondary poisoning
Fatty acid, tall-oil, reaction product with diethylenetriamine, maleic anhydride, tetraethylenepentamine, and triethylenetetramine	0.00217 mg/L	0.000217 mg/L	0.0217 mg/L	1 mg/L	180 mg/kg sediment dw	18 mg/kg sediment dw	Not available	146 mg/kg soil dw	33.34 mg/kg food

**8.2. Exposure controls****Engineering Controls**

Use approved industrial ventilation and local exhaust as required to maintain exposures below applicable exposure limits.

**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.

**Hand Protection****Skin Protection****Eye Protection****Other Precautions**

Nitrile gloves. Viton gloves

Rubber apron.

Chemical goggles; also wear a face shield if splashing hazard exists.

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  
**Odor:** Hydrocarbon  
**Color:** Brown  
**Odor Threshold:** No information available

<u>Property</u> <u>Remarks/ - Method</u>	<u>Values</u>
<b>pH:</b>	No data available
<b>Freezing Point/Range</b>	No data available
<b>Melting Point/Range</b>	No data available
<b>Boiling Point/Range</b>	No data available
<b>Flash Point</b>	
<b>Flammability (solid, gas)</b>	No data available
upper flammability limit	
lower flammability limit	
<b>Evaporation rate</b>	No data available
<b>Vapor Pressure</b>	No data available
<b>Vapor Density</b>	No data available
<b>Specific Gravity</b>	1.1-2.1
<b>Water Solubility</b>	Insoluble in water
<b>Solubility in other solvents</b>	No data available
<b>Partition coefficient: n-octanol/water</b>	No data available
<b>Autoignition Temperature</b>	
<b>Decomposition Temperature</b>	No data available
<b>Viscosity</b>	No data available
<b>Explosive Properties</b>	No information available
<b>Oxidizing Properties</b>	No information available

**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**

Keep away from heat, sparks and flame.

**10.5. Incompatible Materials**

Strong oxidizers. Strong acids.

**10.6. Hazardous Decomposition Products**

Oxides of nitrogen. Carbon monoxide and carbon dioxide.

**SECTION 11: Toxicological Information**
**11.1. Information on Toxicological Effects****Acute Toxicity****Inhalation**

May cause respiratory irritation. Excessive inhalation causes headache, dizziness, nausea and incoordination.

**Eye Contact**

Causes moderate eye irritation.

**Skin Contact**

May cause an allergic skin reaction. Moderate Skin Irritation (after prolonged or repeated contact): signs/symptoms can include redness, swelling, itching, and dryness.

**Ingestion**

Aspiration into the lungs may cause chemical pneumonitis including coughing, difficulty breathing, wheezing, coughing up blood and pneumonia, which can be fatal.

**Toxicology data for the components**

Substances	CAS Number	LD50 Oral	LD50 Dermal	LC50 Inhalation
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)
Paraffins, petroleum, normal C>10	64771-71-7	> 5000 mg/kg (Rat) (similar substance)	> 2000 mg/kg (Rabbit) (similar substance)	> 1369 ppm (Rat, 4h, vapor) (saturation)
Calcium chloride	10043-52-4	> 1000 mg/kg (Rat) 2301 mg/kg (Rat)	5000 mg/kg (Rabbit)	No data available

		> 2000 mg/kg (Rat) 2240 mg/kg (Rat)		
Fatty acid, tall-oil, reaction product with diethylenetriamine, maleic anhydride, tetraethylenepentamine, and triethylenetetramine	68990-47-6	> 2020 mg/kg (Rat)	> 2000 mg/kg (Rat)	No data available

Substances	CAS Number	Skin corrosion/irritation
Paraffin, petroleum, normal C5-C20	64771-72-8	Not irritating to skin in rabbits.
Paraffins, petroleum, normal C>10	64771-71-7	Non-irritating to the skin (Rabbit) (similar substances)
Calcium chloride	10043-52-4	Causes mild skin irritation (Rabbit)
Fatty acid, tall-oil, reaction product with diethylenetriamine, maleic anhydride, tetraethylenepentamine, and triethylenetetramine	68990-47-6	Non-irritating to the skin

Substances	CAS Number	Eye damage/irritation
Paraffin, petroleum, normal C5-C20	64771-72-8	Non-irritating to rabbit's eye (similar substances)
Paraffins, petroleum, normal C>10	64771-71-7	Non-irritating to the eye (Rabbit) (similar substances)
Calcium chloride	10043-52-4	Causes severe eye irritation. (Rabbit)
Fatty acid, tall-oil, reaction product with diethylenetriamine, maleic anhydride, tetraethylenepentamine, and triethylenetetramine	68990-47-6	Non-irritating to the eye

Substances	CAS Number	Skin Sensitization
Paraffin, petroleum, normal C5-C20	64771-72-8	Did not cause sensitization on laboratory animals (guinea pig) Patch test on human volunteers did not demonstrate irritating properties
Paraffins, petroleum, normal C>10	64771-71-7	Did not cause sensitization on humans or laboratory animals. (guinea pig) (similar substances)
Calcium chloride	10043-52-4	No information available
Fatty acid, tall-oil, reaction product with diethylenetriamine, maleic anhydride, tetraethylenepentamine, and triethylenetetramine	68990-47-6	Skin sensitizer in guinea pig.

Substances	CAS Number	Respiratory Sensitization
Paraffin, petroleum, normal C5-C20	64771-72-8	No information available
Paraffins, petroleum, normal C>10	64771-71-7	No information available
Calcium chloride	10043-52-4	No information available
Fatty acid, tall-oil, reaction product with diethylenetriamine, maleic anhydride, tetraethylenepentamine, and triethylenetetramine	68990-47-6	No information available

Substances	CAS Number	Mutagenic Effects
Paraffin, petroleum, normal C5-C20	64771-72-8	In vitro tests did not show mutagenic effects In vivo tests did not show mutagenic effects.
Paraffins, petroleum, normal C>10	64771-71-7	In vitro tests did not show mutagenic effects In vivo tests did not show mutagenic effects. (similar substances)
Calcium chloride	10043-52-4	Did not show mutagenic effects in animal experiments
Fatty acid, tall-oil, reaction product with diethylenetriamine, maleic	68990-47-6	In vivo tests did not show mutagenic effects.

anhydride, tetraethylenepentamine, and triethylenetetramine		
Substances	CAS Number	Carcinogenic Effects
Paraffin, petroleum, normal C5-C20	64771-72-8	Not regarded as carcinogenic. (similar substances)
Paraffins, petroleum, normal C>10	64771-71-7	Not regarded as carcinogenic. (similar substances)
Calcium chloride	10043-52-4	No information available.
Fatty acid, tall-oil, reaction product with diethylenetriamine, maleic anhydride, tetraethylenepentamine, and triethylenetetramine	68990-47-6	No information available.
Substances	CAS Number	Reproductive toxicity
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)
Paraffins, petroleum, normal C>10	64771-71-7	Animal testing did not show any effects on fertility. Did not show teratogenic effects in animal experiments. (similar substances)
Calcium chloride	10043-52-4	Animal testing did not show any effects on fertility.
Fatty acid, tall-oil, reaction product with diethylenetriamine, maleic anhydride, tetraethylenepentamine, and triethylenetetramine	68990-47-6	Animal testing did not show any effects on fertility.
Substances	CAS Number	STOT - single exposure
Paraffin, petroleum, normal C5-C20	64771-72-8	No significant toxicity observed in animal studies at concentration requiring classification.
Paraffins, petroleum, normal C>10	64771-71-7	No significant toxicity observed in animal studies at concentration requiring classification. (similar substances)
Calcium chloride	10043-52-4	No significant toxicity observed in animal studies at concentration requiring classification.
Fatty acid, tall-oil, reaction product with diethylenetriamine, maleic anhydride, tetraethylenepentamine, and triethylenetetramine	68990-47-6	No information available
Substances	CAS Number	STOT - repeated exposure
Paraffin, petroleum, normal C5-C20	64771-72-8	No significant toxicity observed in animal studies at concentration requiring classification. (similar substances)
Paraffins, petroleum, normal C>10	64771-71-7	No significant toxicity observed in animal studies at concentration requiring classification. (similar substances)
Calcium chloride	10043-52-4	No information available.
Fatty acid, tall-oil, reaction product with diethylenetriamine, maleic anhydride, tetraethylenepentamine, and triethylenetetramine	68990-47-6	No data of sufficient quality are available.
Substances	CAS Number	Aspiration hazard
Paraffin, petroleum, normal C5-C20	64771-72-8	Aspiration into the lungs may cause chemical pneumonitis including coughing, difficulty breathing, wheezing, coughing up blood and pneumonia, which can be fatal.
Paraffins, petroleum, normal C>10	64771-71-7	Aspiration into the lungs may cause chemical pneumonitis including coughing, difficulty breathing, wheezing, coughing up blood and pneumonia, which can be fatal.
Calcium chloride	10043-52-4	Not applicable
Fatty acid, tall-oil, reaction product with diethylenetriamine, maleic anhydride, tetraethylenepentamine, and triethylenetetramine	68990-47-6	Not applicable



## SECTION 12: Ecological Information

### 12.1. Toxicity Ecotoxicity Effects

Substances	CAS Number	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Toxicity to Invertebrates
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)
Paraffins, petroleum, normal C>10	64771-71-7	EL50 (72h) > 10000 mg/L (Skeletonema costatum) (similar substance)	LL50 (96h) > 1000 mg/L (Oncorhynchus mykiss) (similar substance) LL50 (96h) > 1028 mg/L (Scophthalmus maximus) (similar substance)	No information available	EL50 (48h) > 1000 mg/L (Daphnia Magna) (similar substance) EL50 (48h) > 1000 mg/L (Chaetogammarus marinus) (similar substance) EL50 (48h) > 10000 mg/L (Acartia tonsa) (similar substance)
Calcium chloride	10043-52-4	ErC50 (72h) 2900 mg/L (Pseudokirchnerella subcapitata) ErC50 (72h) 4000 mg/L (Pseudokirchnerella subcapitata)	LC50 (96h) 4630 mg/L (Pimephales promelas) LC50 (48h) >6560 mg/L (Pimephales promelas) LC50 (24h) >6660 mg/L (Pimephales promelas)	No information available	EC50 (48h) 2400 mg/L (Daphnia magna) EC50 (21d) 610 mg/L (reproduction) (Daphnia magna)
Fatty acid, tall-oil, reaction product with diethylenetriamine, maleic anhydride, tetraethylenepentamine, and triethylenetetramine	68990-47-6	EC50 (72h) > 100 mg/L (growth rate) (Pseudokirchnerella subcapitata)	LC50 (96h) > 100 mg/L (Danio rerio)	EC50 (3h) > 100 mg/L (Activated sludge) (respiration rate)	IC50 (48h) > 100 mg/L (Daphnia magna)

### 12.2. Persistence and degradability

Substances	CAS Number	Persistence and Degradability
Paraffin, petroleum, normal C5-C20	64771-72-8	Readily biodegradable (74% @ 28d)
Paraffins, petroleum, normal C>10	64771-71-7	Readily biodegradable (80% @ 28d)
Calcium chloride	10043-52-4	The methods for determining biodegradability are not applicable to inorganic substances.
Fatty acid, tall-oil, reaction product with diethylenetriamine, maleic anhydride, tetraethylenepentamine, and triethylenetetramine	68990-47-6	Readily biodegradable (71% @ 28d)

### 12.3. Bioaccumulative potential

Substances	CAS Number	Log Pow
Paraffin, petroleum, normal C5-C20	64771-72-8	> 6
Paraffins, petroleum, normal C>10	64771-71-7	> 7.1
Calcium chloride	10043-52-4	No information available
Fatty acid, tall-oil, reaction product with diethylenetriamine, maleic anhydride, tetraethylenepentamine, and triethylenetetramine	68990-47-6	2.4

### 12.4. Mobility in soil

Substances	CAS Number	Mobility
Paraffin, petroleum, normal C5-C20	64771-72-8	No information available
Paraffins, petroleum, normal C>10	64771-71-7	No information available
Calcium chloride	10043-52-4	No information available
Fatty acid, tall-oil, reaction product with diethylenetriamine, maleic anhydride, tetraethylenepentamine, and triethylenetetramine	68990-47-6	No information available

### 12.5. Results of PBT and vPvB assessment

No information available.

Substances	PBT and vPvB assessment
Paraffin, petroleum, normal C5-C20	Not PBT/vPvB
Paraffins, petroleum, normal C>10	Not PBT/vPvB
Calcium chloride	Not applicable
Fatty acid, tall-oil, reaction product with diethylenetriamine, maleic anhydride, tetraethylenepentamine, and triethylenetetramine	Not PBT/vPvB

**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**

Disposal should be made in accordance with federal, state, and local regulations.

**Contaminated Packaging**

Follow all applicable national or local regulations.

**SECTION 14: Transport Information****IMDG/IMO**

<b>UN Number:</b>	Not restricted
<b>UN Proper Shipping Name:</b>	Not restricted
<b>Transport Hazard Class(es):</b>	Not applicable
<b>Packing Group:</b>	Not applicable
<b>Environmental Hazards:</b>	Not applicable

**RID**

<b>UN Number:</b>	Not restricted
<b>UN Proper Shipping Name:</b>	Not restricted
<b>Transport Hazard Class(es):</b>	Not applicable
<b>Packing Group:</b>	Not applicable
<b>Environmental Hazards:</b>	Not applicable

**ADR**

<b>UN Number:</b>	Not restricted
<b>UN Proper Shipping Name:</b>	Not restricted
<b>Transport Hazard Class(es):</b>	Not applicable
<b>Packing Group:</b>	Not applicable
<b>Environmental Hazards:</b>	Not applicable

**IATA/ICAO**

<b>UN Number:</b>	Not restricted
<b>UN Proper Shipping Name:</b>	Not restricted
<b>Transport Hazard Class(es):</b>	Not applicable
<b>Packing Group:</b>	Not applicable
<b>Environmental Hazards:</b>	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/NDL** - Canadian Domestic Substances List/Non-Domestic Substances List**Germany, Water Endangering  
Classes (WGK)**

WGK 2: 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/](http://www.ChemADVISOR.com/)**Revision Date:**

24-Sep-2015

**Revision Note**

Not applicable

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

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**End of Safety Data Sheet**