

SAFETY DATA SHEET

according to Regulation (EC) No. 453/2010

EZ MUL® NT NS

Revision Date: 26-Sep-2013

Revision Number: 11

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product Identifier

Product Name EZ MUL® NT NS

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

Recommended Use	Emulsifier
Sector of use	SU2 - Mining, (including offshore industries)
Product category	PC20 - Products such as pH-regulators, flocculants, precipitants, neutralization agents, other unspecific
Process categories	PROC4 - Use in batch and other process (synthesis) where opportunity for exposure arises

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

Emergency Phone Number: +44 1224 795277 or +1 281 575 5000

www.halliburton.com

For further information, please contact

E-Mail address: fdunexchem@halliburton.com

1.4 Emergency telephone number

+44 1224 795277 or +1 281 575 5000

Emergency telephone - §45 - (EC)1272/2008	
Europe	112
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
Spain	Poison Information Service (ES): +34 91 562 04 20
United Kingdom	NHS Direct (UK): +44 0845 46 47

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

REGULATION (EC) No 1272/2008

Skin Corrosion / irritation	Category 2 - H315
Serious Eye Damage / Eye Irritation	Category 2 - H319
Skin Sensitization	Category 1 - H317

Classification according to EU Directives 67/548/EEC or 1999/45/EC
 For the full text of the R-phrases mentioned in this Section, see Section 16

Classification Xi - Irritant.

Risk Phrases R43 May cause sensitization by skin contact.
 R36/38 Irritating to eyes and skin.

2.2 Label Elements

Hazard Pictograms



Signal Word Warning

Hazard Statements

H315 - Causes skin irritation
 H317 - May cause an allergic skin reaction
 H319 - Causes serious eye irritation

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

P280 - Wear protective gloves/eye protection/face protection
 P302 + P352 - IF ON SKIN: Wash with plenty of soap and water
 P332 + P313 - If skin irritation occurs: Get medical advice/attention
 P362 - Take off contaminated clothing and wash before reuse
 P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 P337 + P313 - If eye irritation persists: Get medical advice/attention

Contains

Substances	CAS Number
Fatty acid, tall-oil, reaction product with diethylenetriamine, maleic anhydride, tetraethylenepentamine, and triethylenetriamine	68990-47-6
Hydrotreated light petroleum distillate	64742-47-8

2.3 Other Hazards

None known

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances	EINECS	CAS Number	PERCENT (w/w)	EEC Classification	EU - CLP Substance Classification	REACH No.
Fatty acid, tall-oil, reaction product with diethylenetriamine, maleic anhydride, tetraethylenepentamine, and triethylenetriamine	273-601-0	68990-47-6	60 - 100%	Xi; R36/38	Eye Irrit. 2 (H319) Skin Irrit. 2 (H315) Skin Sens. 1 (H317)	01-2119496070-42
Hydrotreated light petroleum distillate	265-149-8	64742-47-8	10 - 30%	Xn; R65	Asp. Tox. 1 (H304)	01-2119484819-18

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

4. FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation	If inhaled, remove to fresh air. If not breathing give artificial respiration, preferably mouth-to-mouth. If breathing is difficult give oxygen. Get medical attention.
Eyes	In case of contact, or suspected contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention immediately after flushing.
Skin	Wash with soap and water. Get medical attention if irritation persists.
Ingestion	Get medical attention! If vomiting occurs, keep head lower than hips to prevent aspiration.

4.2 Most important symptoms and effects, both acute and delayed

May cause eye and skin irritation. May cause allergic skin reaction.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically

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

None known.

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

Decomposition in fire may produce toxic 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.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use appropriate protective equipment.

See Section 12 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 12 for additional information.

7. HANDLING AND STORAGE

7.1 Precautions for Safe Handling

Avoid contact with eyes, skin, or clothing. Avoid breathing vapors. Wash hands after use. Launder contaminated clothing before reuse.

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)

Exposure Scenario No information available

Other Guidelines No information available

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters**Exposure Limits**

Substances	CAS Number	EU	UK OEL	Netherlands	France OEL
Fatty acid, tall-oil, reaction product with diethylenetriamine, maleic anhydride, tetraethylenepentamine, and triethylenetriamine	68990-47-6	Not applicable	Not applicable	Not applicable	Not applicable
Hydrotreated light petroleum distillate	64742-47-8	Not applicable	Not applicable	Not applicable	Not applicable

Substances	CAS Number	Germany MAK/TRK	Spain	Portugal	Finland
Fatty acid, tall-oil, reaction product with diethylenetriamine, maleic anhydride, tetraethylenepentamine, and triethylenetriamine	68990-47-6	Not applicable	Not applicable	Not applicable	Not applicable
Hydrotreated light petroleum distillate	64742-47-8	Not applicable	Not applicable	Not applicable	Not applicable

Substances	CAS Number	Austria	Ireland	Switzerland	Norway
Fatty acid, tall-oil, reaction product with diethylenetriamine, maleic anhydride, tetraethylenepentamine, and triethylenetriamine	68990-47-6	Not applicable	Not applicable	Not applicable	Not applicable
Hydrotreated light petroleum distillate	64742-47-8	Not applicable	Not applicable	Not applicable	Not applicable

Substances	CAS Number	Italy	Poland	Hungary	Czech Republic
Fatty acid, tall-oil, reaction product with diethylenetriamine, maleic anhydride, tetraethylenepentamine, and triethylenetriamine	68990-47-6	Not applicable	Not applicable	Not applicable	Not applicable
Hydrotreated light petroleum distillate	64742-47-8	Not applicable	Not applicable	Not applicable	Not applicable

Substances	CAS Number	Denmark
Fatty acid, tall-oil, reaction product with diethylenetriamine, maleic anhydride, tetraethylenepentamine, and triethylenetriamine	68990-47-6	Not applicable
Hydrotreated light petroleum distillate	64742-47-8	Not applicable

**Derived No Effect Level (DNEL)
Worker**

No information available.

General Population**Predicted No Effect Concentration (PNEC)**

No information available.

8.2 Exposure controls**Engineering Controls**

Use in a well ventilated area. Local exhaust ventilation should be used in areas without good cross ventilation.

Personal protective equipment**Respiratory Protection**

Organic vapor respirator with a dust/mist filter. (A2P2/P3) In high concentrations, supplied air respirator or a self-contained breathing apparatus.

Hand Protection

Impervious rubber 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

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical State: Liquid **Color:** Dark amber
Odor: Mild hydrocarbon **Odor Threshold:** No information available

<u>Property</u> Remarks/ - Method	<u>Values</u>
pH:	5-7
Freezing Point/Range	No data available
Melting Point/Range	No data available
Boiling Point/Range	150 °C
Flash Point	65 °C PMCC
upper flammability limit	4.7
lower flammability limit	0.6
Evaporation rate	No data available
Vapor Pressure	No data available
Vapor Density	No data available
Specific Gravity	0.89
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 available
Oxidizing Properties	No information available

9.2 Other information

VOC Content (%) No data available

10. STABILITY AND REACTIVITY

10.1 Reactivity

Not applicable

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.

10.6 Hazardous Decomposition Products

Oxides of nitrogen. Hydrocarbons. Carbon monoxide and carbon dioxide.

11. TOXICOLOGICAL INFORMATION

11.1 Information on Toxicological Effects

Acute Toxicity

Inhalation

May cause respiratory irritation. May cause central nervous system depression including headache, dizziness, drowsiness, incoordination, slowed reaction time, slurred speech, giddiness and unconsciousness.

Eye Contact

May cause eye irritation.

Skin Contact

May cause skin irritation. May cause an allergic skin reaction.

Ingestion

Aspiration into the lungs may cause chemical pneumonitis including coughing, difficulty breathing, wheezing, coughing up blood and pneumonia, which can be fatal. May cause central nervous system depression including headache, dizziness, drowsiness, muscular weakness, incoordination, slowed reaction time, fatigue blurred vision, slurred speech, giddiness, tremors and convulsions.

Chronic Effects/Carcinogenicity No data available to indicate product or components present at greater than 1% are chronic health hazards.

Toxicology data for the components

Substances	CAS Number	LD50 Oral	LD50 Dermal	LC50 Inhalation
Fatty acid, tall-oil, reaction product with diethylenetriamine, maleic anhydride, tetraethylenepentamine, and triethylenetriamine	68990-47-6	No data available	No data available	No data available
Hydrotreated light petroleum distillate	64742-47-8	5000 mg/kg (Rat)	2000 mg/kg (Rabbit)	5.2 mg/L (Rat) 4 h

12. ECOLOGICAL INFORMATION**12.1 Toxicity
Ecotoxicity Effects**

Substances	CAS Number	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Fatty acid, tall-oil, reaction product with diethylenetriamine, maleic anhydride, tetraethylenepentamine, and triethylenetriamine	68990-47-6	No information available	No information available	No information available	No information available
Hydrotreated light petroleum distillate	64742-47-8	No information available	LC50: 2.4 mg/L (Oncorhynchus mykiss)	No information available	LC50: 4720 mg/L (Den-dronereides heteropoda)

12.2 Persistence and degradability

No information available

12.3 Bioaccumulative potential

No information available

12.4 Mobility in soil

No information available

12.5 Results of PBT and vPvB assessment

No information available.

12.6 Other adverse effects**Endocrine Disruptor Information**

This product does not contain any known or suspected endocrine disruptors

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.**14. TRANSPORT INFORMATION****IMDG/IMO**

UN Number:	Not restricted.
UN Proper Shipping Name:	Not restricted
Transport Hazard Class(es):	Not applicable

RID

UN Number: Not restricted.
UN Proper Shipping Name: Not restricted
Transport Hazard Class(es): Not applicable

ADR

UN Number: Not restricted.
UN Proper Shipping Name: Not restricted
Transport Hazard Class(es): Not applicable

IATA/ICAO

UN Number: Not restricted.
UN Proper Shipping Name: Not restricted
Transport Hazard Class(es): Not applicable

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

15. REGULATORY INFORMATION**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****International Inventories**

All of the components in the product are on the following Inventory lists: All of the components in the product are on the following Inventory lists:.

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 All components listed on inventory or are exempt.

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

16. OTHER INFORMATION**Full text of R-phrases referred to under Sections 2 and 3**

R43 May cause sensitization by skin contact.

R36/38 Irritating to eyes and skin.

Key literature references and sources for data

www.ChemADVISOR.com/

Revision Date: 26-Sep-2013

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