MATERIAL SAFETY DATA SHEET

ONSHORE OILS	Product: **"DEGREASER" CONCENTRATE**

SECTION 1 – STATEMENT OF CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

SUPPLIER:	ONSHORE OILS PTY LTD		
ADDRESS:	PO Box 7177, Hemmant QLD 4174		
Trade Name:	**"DEGREASER" CONCENTRATE**		
TELEPHONE:	07 3348 8388	**FAX:**	07 3390 7455
AH EMERGENCY TELEPHONE:	13 1126 in Australia	**ABN:**	94 069 964 834
Substance:	Liquid	**Product Use:**	Heavy Duty Degreaser
Creation Date:	MARCH 2012	**Revision Date:**	MARCH 2017
Product Code:	OODC		

SECTION 2 – HAZARDS IDENTIFICATION

- This product is **classified as HAZARDOUS (IRRITANT)** according to criteria of the National Occupational Health and Safety Commission Australia.
- This product is **NOT classified as Dangerous Goods** according to the Australian Dangerous Goods (ADG) Code.
- This product is **classified as a Scheduled Poison S5** according to the SUSDP.

Approved Worksafe Classification

Xi - IRRITANT
R36/38 – Irritating to skin and eyes.
S(1/2) – Keep locked up and out of reach of children.
S24/25 - Avoid contact with skin and eyes.
S36/37/39 – Wear suitable protective clothing, gloves and eye/face protection.
S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label whenever possible).
S46 - If swallowed, seek medical advice immediately and show this container or label.

UN Number	none allocated	**ADG Classification**	none allocated
Shipping Name	none allocated	**ADG Subsidiary Risk**	none allocated
Hazchem Code	none allocated	**Packing Group**	none allocated
SUSDP Classification	S5 (ALKALINE SALTS)		

EMERGENCY OVERVIEW

Colour	Green	**Odour**	Faint
Physical Description	Liquid	**Viscosity**	non-viscous liquid
Major Health Hazards	None known		

SECTION 3 – COMPOSITION AND INFORMATION ON INGREDIENTS

Ingredients determined not to be hazardous are present in concentrations that do not exceed the relevant cut-off concentrations as found from NOHSC publication "List of Designated Hazardous Substances" or have been found NOT to meet the criteria of a hazardous substance as defined in the NOHSC publication "Approved Criteria for Classifying Hazardous Substances".

Ingredients:	CAS Number:	Proportion:	Exposure Standards TWA	Exposure Standards STEL
Sodium dodecylbenzene sulphonate	25155-30-0	< 10% w/w	not set	not set
Disodium metasilicate	6834-92-0	< 10% w/w	not set	not set
Ethylene glycol monobutyl ether	111-76-2	< 10% w/w	20ppm (96.9 mg/m^3)	50 ppm (242 mg/ m^3)
Ingredients determined to be non-hazardous	Various	< 10% w/w	not set	not set
Water	7732-18-5	> 60% w/w	not set	not set

The **TWA** exposure value is the Time Weighted Average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. The **STEL** (Short Term Exposure Limit) is an exposure value that should not be exceeded for more than 15 minutes and should not be repeated for more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The term "peak" is used when the TWA limit, because of the rapid action of the substance, should never be exceeded, even briefly.

SECTION 4 – FIRST AID MEASURES

Scheduled Poisons	Poisons Information Centre in each Australian State capital city or in Christchurch, New Zealand can provide additional assistance for scheduled poisons. (Phone Australia 131126 or New Zealand 03 474 7000).
First Aid Facilities	Normal washroom facilities.
Skin contact	Wash skin with water. Remove contaminated clothing and wash before re-use. Seek medical advice (e.g. doctor) if irritation, burning or redness develops.
Eye contact	Immediately irrigate with copious quantities of water for at least 20 minutes. Eyelids to be held open. Seek medical advice (e.g. ophthalmologist).
Ingestion	Do NOT induce vomiting. Do NOT attempt to give anything by mouth to an unconscious person. Rinse mouth thoroughly with water immediately. Give water to drink. If vomiting occurs, give further water to achieve effective dilution. Seek medical advice (e.g. doctor).
Inhalation	Remove victim to fresh air away from exposure - avoid becoming a casualty. Seek medical advice (e.g. doctor).
Advice to Doctor	Treat symptomatically. All treatments should be based on observed signs and symptoms of distress of the patient. Poisons Information Centre in each Australian State capital city or in Christchurch, New Zealand can provide additional assistance for scheduled poisons.
Aggravated Medical Conditions	None known.

SECTION 5 – FIRE FIGHTING MEASURES

Fire and Explosion Hazards	Water based. Not combustible. However if involved in a fire will emit toxic fumes.
Extinguishing Media	Use an extinguishing media suitable for surrounding fires.
Fire Fighting	Keep containers exposed to extreme heat cool with water spray. Fire fighters to wear self-contained breathing apparatus if risk of exposure to products of combustion or decomposition. Evacuate area - move upwind of fire.
Flash Point	Not combustible.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Emergency Procedures	No HAZCHEM code.
Occupational Release	Minor spills do not normally need any special clean-up measures. In the event of a major spill, prevent spillage from entering drains or water courses. For large spills, or tank rupture, stop leak if safe to do so. Wear appropriate protective equipment as in section 8 below to prevent skin and eye contamination. Spilt material may result in a slip hazard and should be absorbed into dry, inert material (e.g. sand, earth or vermiculite), which then can be put into appropriately labelled drums for disposal by an approved agent according to local conditions. Residual deposits will remain slippery. Wash area down with excess water. If contamination of sewers or waterways has occurred advise the local emergency services. In the event of a large spillage notify the local environment protection authority or emergency services.

SECTION 7 – HANDLING AND STORAGE

Handling	Avoid contact with incompatible materials. When handling, DO NOT eat, drink or smoke. Keep containers closed at all times. Avoid physical damage to containers. Always wash hands with water after handling.

Storage Store in a cool, dry, place with good ventilation. Avoid storing in aluminium and light alloy containers. Store away from incompatible materials (Section 10). Keep containers closed at all times – check regularly for leaks.

SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Limits National Occupational Exposure Limits, as published by National Occupational Health & Safety Commission:
Time-weighted Average (TWA): None established for specific product.
See **SECTION 3** for Exposure Limits of individual ingredients.
Short Term Exposure Limit (STEL): None established for specific product.
See **SECTION 3** for Exposure Limits of individual ingredients.

Biological Limit Value None established for product.

Engineering Controls Use in a well-ventilated area

Personal Protective Equipment This product is classified as hazardous (IRRITANT) according to the criteria of Worksafe Australia. Upon dilution with an equal volume of water, (50:50) the product is classed as non-hazardous.
Use good occupational work practice. The use of protective clothing and equipment depends upon the degree and nature of exposure. Final choice of appropriate protection will vary according to individual circumstances i.e. methods of handling or engineering controls and according to risk assessments undertaken. The following protective equipment should be available;

Eye Protection

The use of safety glasses with side shield protection, goggles or face shield is recommended to handle in quantity, cleaning up spills, decanting, etc. Contact lenses pose a special hazard ; soft lenses may absorb irritants and all lenses concentrate them.

Skin Protection

Gloves are recommended for sensitive skin.
Overalls, work boots and elbow length gloves are recommended for handling the concentrated product (as per AS/NZS 2161, or as recommended by supplier) in quantity, cleaning up spills, decanting, etc.

Protective Material Types Material suitable for detergent contact – Butyl rubber, Natural Latex, Neoprene, PVC, and Nitrile.

Respirator

Not required for normal and intended cleaning operations with adequate ventilation. Where high contaminant spray mist or vapour levels exist, ie, approaching the exposure limit, the following additional equipment is required: For short elevated exposures, eg, spillages:- Appropriate organic vapour cartridge respirator as per the requirements of AS/NZS 1715 and AS/NZS 1716 (Respiratory protective devices). For prolonged exposure and confined spaces:- full face air supplied or self contained breathing apparatus (if vapour levels exceed the Exposure Limit by more than ten times, air supplied apparatus should be used).

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid	**Colour**	green
Odour	faint odour	**Specific Gravity**	1.05 - 1.08 @ 25 °C
Boiling Point	Approximately 100 °C	**Freezing Point**	Approximately 0 °C
Vapour Pressure	Not available	**Vapour Density**	Not available
Flash Point	Not flammable	**Flammable Limits**	None
Water Solubility	Miscible in all proportions	**pH**	12.8 neat
Volatile Organic Compounds (VOC)	approx 7.0 % v/v	**Coefficient of Water/Oil Distribution**	Not available

Viscosity	Not available	**Odour Threshold**	Not available
Evaporation Rate	Not available	**Per Cent Volatile**	Ca 80 % v/v

SECTION 10 – STABILITY AND REACTIVITY

Chemical Stability	Stable at normal temperatures and pressure.
Conditions to Avoid	May corrode mild steel, copper, aluminium and zinc fittings.
Incompatible Materials	Oxidizing agents and reducing agents.
Hazardous Decomposition	Product can decompose on combustion (burning) to form Carbon Monoxide, Carbon Dioxide, and other possibly toxic gases and vapours.
Hazardous Reactions	None known.

SECTION 11 – TOXICOLOGICAL INFORMATION

PRODUCT MIXTURE INFORMATION

Local Effects	Mild irritant: eye, skin, inhalation and ingestion.
Target Organs	Eyes, mucous membranes, skin.

POTENTIAL HEALTH EFFECTS

Ingestion	
short term exposure	Swallowing can result in nausea, vomiting of blood and eroded tissue; chemical burns of the mouth, throat & abdomen; perforation of the gastrointestinal tract. This product containing ethylene glycol mono butyl ether may cause headache, dizziness, light-headedness, confusion, and passing out, and may damage the liver and kidneys on ingestion.
long term exposure	No information available.
Skin contact	
short term exposure	Irritating to skin - may cause skin burns, severe irritation. Corrosion will continue until removed. Severity depends on the concentration and duration of exposure. Skin contact with this product containing ingredient ethylene glycol monobutyl ether may cause central nervous system effects.
long term exposure	Prolonged and repeated skin contact with undiluted solutions may induce eczematoid dermatitis.
Eye contact	
short term exposure	Eye contact may cause stinging, blurring, tearing, pain.
long term exposure	No information available.
Inhalation	
short term exposure	Inhalation of mists or aerosols can produce mucous membrane and respiratory irritation. Exposure to high concentrations of the product in liquid form or as a mist may lead to possible harmful corrosive effects including lesions of the nasal septum, pulmonary edema, pneumonitis and emphysema. Aerosols of this product containing ingredient ethylene glycol monobutyl ether may cause central nervous system effects if inhaled.
long term exposure	No information available.
Carcinogen Status	
NOHSC	No significant ingredient is classified as carcinogenic by NOHSC.
NTP	No significant ingredient is classified as carcinogenic by NTP.
IARC	No significant ingredient is classified as carcinogenic by IARC.
Medical conditions aggravated by exposure	No information available.

CLASSIFICATION OF INDIVIDUAL INGREDIENTS

NOTE : This information relates to each individual ingredient, when evaluated as pure undiluted chemical. See SECTION 3 for actual proportions of ingredients present in this product.

Ingredients	**R-Phrases.**
Sodium dodecylbenzene sulphonate	R36/38 when >20%

Disodium metasilicate	R36/38 when >5%
Ethylene glycol monobutyl ether	R22 when > 25%
Non hazardous ingredients 100%	None allocated

100% Sodium dodecylbenzenesulfonate

Irritation Data	20 mg/24 hour(s) skin-rabbit moderate; 250 ug/24 hour(s) eyes-rabbit severe; 1 percent eyes-rabbit severe.
Toxicity Data	438 mg/kg oral-rat LD50; 1330 mg/kg oral-mouse LD50; 105 mg/kg intravenous-mouse LD50; 3040 mg/kg/30 day(s) continuous oral-rat TDLo; 5 gm/kg/30 day(s) intermittent oral-mouse TDLo.
Local Effects	Irritant: inhalation, skin, eye.
Target Organs	Eyes, skin, mucous membranes.
Acute Toxicity	Toxic: ingestion.
Mutagenic Data	No available information.
Reproductive Effects	No available information.

100% Disodium metasilicate

Irritation Data	Hazardous in case of skin contact (corrosive), of ingestion (corrosive), of inhalation (lung irritant). Causes burns Eye: Risk of serious damage to eyes. Respiratory: Irritating to respiratory system. Sensitization: No sensitizing (30% w/w in a formulation). 250 mg/24 hour(s) skin-human : severe 250 mg/24 hour(s) skin-rabbit : severe 250 mg/24 hour(s) skin-guinea pig : moderate.
Toxicity Data	1153 mg/kg oral-rat LD50; 770 mg/kg oral-mouse LD50; 250 mg/kg oral-dog LDLo; 250 mg/kg oral-pig LDLo; 200 mg/kg intraperitoneal-guinea pig LDLo. Other toxicological information: The toxic effects of the product are caused by the alkalinity and not by substance specific corrosive nature of the product.
Local Effects	Corrosive: inhalation, skin, eye, ingestion
Target Organs	Skin, mucous membranes, eyes.
Acute Toxicity Level	Moderately Toxic: ingestion
Mutagenic Data	Gentoxicity: Not mutagenic (in vitro)
Reproductive Effects Data	15 gm/kg oral-rat TDLo 14 week(s) male week(s) pre pregnancy/14 week(s) post pregnancy/3 week(s) continuous; 9766 ug/kg subcutaneous-rat TDLo 1 day(s) male; 9766 ug/kg intratesticular-rat TDLo 1 day(s) male.

100% Ethylene glycol mono butyl ether (2-butoxy ethanol)

Irritation Data	500 mg open skin-rabbit mild: 100mg eyes - rabbit severe: 100mg/24 hour(s) eyes – rabbit moderate.
Toxicity Data	The lethal oral dose of ethylene glycols in humans is approximately 1.4 ml/kg, which would be equivalent to approximately 100 ml of 100% 2-butoxyethanol for a 70 kg person. LD50 Rat oral 1.48 g/kg, LD50 Mouse oral 1.2 g/kg, LD50 Rabbit oral 0.32g/kg, LD50 Guinea pig oral 1.2 g/kg, LD50 Rabbit dermal 400 mg/kg. Odour threshold Value : 0.10 ppm (detection), 0.35 ppm (recognition), IDLH Level : 700 ppm. 2-Butoxy Ethanol may damage the liver and kidneys.
Local Effects	Irritant: inhalation, skin, eye.
Target Organs	Blood, central nervous system, kidneys.
Acute Toxicity Level	Toxic: inhalation, dermal absorption, ingestion.
Mutagenic Data	A statistically significant increase in mutations not generally observed in cell cultures at any concentration for a range of tests.
Reproductive Effects Data	2-Butoxy Ethanol may damage the developing fetus. 2-Butoxy Ethanol may damage the testes (male reproductive glands). TCLo: ihl-rat 200 ppm/6H (6-15D preg), TCLo: ihl-rat 25 ppm/6H (6-15D preg), TDLo: orl-mus 9440 mg/kg (7-14D preg), TCLo: ihl-rbt 200 ppm/6H (6-18D preg), TCLo: ihl-rbt 100 ppm/6H (6-18D preg).

Carcinogenicity Insufficient information.

SECTION 12 – ECOLOGICAL INFORMATION

Fish toxicity None available for this specific product. Individual ingredients: The following information relates to Sodium, Silicate, Solution, Molar > 3,2 concentration 35% (IUCLID). Ecotoxicity: Fish: 96h - LC50 (Brachydanio rerio, OECD no. 203) : 3185 mg/l (pH 10.1) Daphnia: 48 h - EC50 (Daphnia magna): 4857 mg/l. Daphnia: 48 h - EC50 (Daphnia magna): 4857 mg/l

Algae toxicity None available for specific product.

Invertebrates toxicity None available for specific product.

Toxicity to Bacteria None available for this specific product. Individual ingredients: The following information relates to Sodium, Silicate, Solution, Molar > 3,2 concentration 35% (IUCLID).Bacteria: 48 h - EC 0 (Pseudomonas putida, OECD no. 209)> 1000mg/l (ph 7.9)

OECD Biological degradation Individual components stated to be readily biodegradable. No hydrocarbons present in the product.

General Product miscible in all proportions with water. AS WITH ANY CHEMICAL PRODUCT, DO NOT DISCHARGE BULK QUANTITIES INTO DRAINS, WATERWAYS, SEWER OR ENVIRONMENT. Inform local authorities if this occurs.

SECTION 13 – DISPOSAL CONSIDERATIONS

Disposal The small quantities contained in wash solutions (when used as directed) can generally be handled by conventional sewage systems, septics, and grey water systems. To dispose of larger quantities of undiluted product, refer to State Land Waste Management Authority. Transfer product residues to a labelled, sealed container for disposal or recovery. Waste disposal must be by an accredited contractor. As with any chemical, do not put down the drain in quantity. For larger scale use, eg. Commercial laundry operations, a recycled water system is often recommended, or Trade Waste License obtained for disposal to sewer.

SECTION 14 – TRANSPORT INFORMATION

UN Number	none allocated	**ADG Classification**	none allocated
Shipping Name	none allocated	**ADG Subsidiary Risk**	none allocated
Hazchem Code	none allocated	**Packing Group**	none allocated
Packaging Method	none allocated	**Special Provisions**	none allocated
Segregation	none allocated		

SECTION 15 – REGULATORY INFORMATION

AICS All ingredients present on AICS.

Labeling Details

HAZARD Xi - IRRITANT

RISK PHRASES R36/38 – Irritating to skin and eyes.

SAFETY PHRASES S(1/2) – Keep locked up and out of reach of children.
S24/25 - Avoid contact with skin and eyes.
S36/37/39 – Wear suitable protective clothing, gloves and eye/face protection.
S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label whenever possible).
S46 - If swallowed, seek medical advice immediately and show this container or label.

SUSDP S5 (ALKALINE SALTS)

ADG Code None allocated

SECTION 16 – OTHER INFORMATION

Acronyms

SUSDP	Standard for the Uniform Scheduling of Drugs and Poisons.
ADG Code	Australian Code for the Transport of Dangerous Goods by Road and Rail.
CAS Number	Chemical Abstracts Service Registry Number.
UN Number	United Nations Number.
R-Phrases	Risk Phrases.
HAZCHEM	An emergency action code of numbers and letters which gives information to emergency services.
NOHSC	National Occupational Health and Safety Commission.
NTP	National Toxicology Program (USA).
IARC	International Agency for Research on Cancer.
AICS	Australian Inventory of Chemical Substances.
TWA	Time Weighted Average
STEL	Short Term Exposure Limit

Literature References

List of Designated Hazardous Substances [NOHSC:10005(1999)]
Australian Code For The Transport Of Dangerous Goods By Road And Rail – Sixth Edition.
Standard for the Uniform Scheduling of Drugs and Poisons.
National Code of Practice for the Preparation of Material Safety Data Sheets 2nd Edition [NOHSC:2011(2003)]
Approved Criteria for Classifying Hazardous Substances [NOHSC:1008(1999)]
Material Safety Data Sheets – individual raw materials – Suppliers.
HSIS – Hazardous Substance Information System – National Worksafe Data Base.

Revision Information	New Issue to standard : 2nd Edition [NOHSC:2011(2003)].		
Note	Safety Data Sheets are updated frequently. Please ensure that you have a current copy.		
Contact Point	Regulatory Affairs Manager.	**Telephone**	07 3807 7400
Issue Date	March 2012	**Supersedes Issue Date**	New issue

This MSDS summarizes at the date of issue our best knowledge of the health and safety hazard information of this product, and in particular how to safely handle and use this product in the workplace. Since the supplier cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, review this MSDS in the context of how the user intends to handle and use the product in the workplace. If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this supplier.