



DOVE
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Information

Product Name	LK-301
Supplier (contact details)	Hi-Bar (UK) Limited P.O. Box 228, Horsham, West Sussex RH13 5FB England UK Tel: 01403 275522 Fax: 01403 211459
General Description	Liquid bioremediation product manufactured from deep farmed Icelandic brown kelp
Recommended Uses	The product has been formulated for: Removing oil from concrete and rock surfaces Cleaning oil tanks, bunded areas and handling areas Removal of oil from clean-up equipment Bioremediation of oil spills
Availability	The product is available in the following pack/shipping sizes: 20 litre minimum size 208 litre poly barrel 1,000 litre bulk (tonne)
Methods of Application	The product may be sprayed, wiped or brushed onto any surface, used as a dip solution or treated as a chemical dispersant
Physical Properties Appearance: Description: Manufacturing Processes: Solubility:	Brown liquid Blend of Brown Kelp (<i>Laminaria digitata</i>) and abstracted water Full fermentation process and proprietary bicatalytic repositioning Fully miscible in salt and fresh water
Health and Safety Data Hazard Classification: Fire Hazard: Flash Point:	Not classified as hazardous Non flammable No flash point
Health Aspects	The product will not irritate sensitive tissues through either transient or prolonged contact, however, local safety conditions should be observed and protective clothing worn. Ingestion of the product in small amounts is unlikely to cause any undesirable effect. However, if large quantities are ingested then diarrhoea may result. The product may be used in confined spaces; however, inhalation of the vapour should be avoided.
Protective Measures	The product does not necessitate the use of special clothing or site protection. However, all personnel should wear protective clothing by virtue of the task being performed and the risk associated with the area being worked on. The product does not necessitate any particular site protection or emergency provisions.
Storage	Store in a cool area away from direct sunlight in airtight containers.
Disposal	Dispose of in accordance with local regulations.
Transport Precautions	No special transport precautions are required for conveyance within the UK and USA. Check local regulations. International transport regulations have no prescribed label and no specified packaging group.
Environmental Aspects	The product is not hazardous to the environment and contains only food grade kelp and well water abstracted from a deep well.
Spill or Leak Procedures	Local precautions are sufficient, no specialist handling or control methods required.
Ventilation & Respiratory Protection	Local exhaust is sufficient ventilation for enclosed space use. The product does not necessitate the use of respirators or masks. However, all personnel should wear protective clothing (gloves, coveralls, goggles, bio/chemical filter masks...) by virtue of the task being performed and the risk associated with the area being worked on.

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MATERIAL SAFETY DATA SHEET

Product Name	PRODUCT IDENTIFICATION										
	<ul style="list-style-type: none">• LK-301										
Description	<ul style="list-style-type: none">• Water based liquid										
Colour	<ul style="list-style-type: none">• Dark to light brown										
Opacity	<ul style="list-style-type: none">• Clear to opaque liquid										
Odour	<ul style="list-style-type: none">• Natural										
Label information	REGULATORY AND HAZARD INFORMATION										
	<ul style="list-style-type: none">• Not classified as hazardous in accordance with the Chemical Hazards Information Package (C.H.I.P.) Regulations 1994										
Ingredients	COMPOSITION										
CAS Numbers	<ul style="list-style-type: none">• Food grade kelp (<i>Laminaria digitata</i>), water• Not applicable										
pH	PHYSICAL AND CHEMICAL PROPERTIES										
Melting point	<ul style="list-style-type: none">• Typically 4.5 (as concentrate)										
Boiling point	<ul style="list-style-type: none">• Approximately 0°C										
Vapour density	<ul style="list-style-type: none">• Approximately 100°C										
Solubility in water	<ul style="list-style-type: none">• As water										
Flammable	<ul style="list-style-type: none">• Miscible in all proportions										
	<table><tr><td>Flash point</td><td><ul style="list-style-type: none">• No flash point</td></tr><tr><td>Autoflammable</td><td><ul style="list-style-type: none">• Not applicable</td></tr><tr><td>Evaporation rate</td><td><ul style="list-style-type: none">• As water</td></tr><tr><td>Flammability Limits</td><td><ul style="list-style-type: none">• Not applicable</td></tr><tr><td>Combustable</td><td><ul style="list-style-type: none">• No</td></tr></table>	Flash point	<ul style="list-style-type: none">• No flash point	Autoflammable	<ul style="list-style-type: none">• Not applicable	Evaporation rate	<ul style="list-style-type: none">• As water	Flammability Limits	<ul style="list-style-type: none">• Not applicable	Combustable	<ul style="list-style-type: none">• No
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Flammability Limits	<ul style="list-style-type: none">• Not applicable										
Combustable	<ul style="list-style-type: none">• No										
Stability	STABILITY AND REACTIVITY										
Conditions to avoid	<ul style="list-style-type: none">• Stored in cool areas, away from direct sunlight, in air-tight containers, should have an indefinite shelf-life										
Incompatibility	<ul style="list-style-type: none">• None• Will cease to be effective in the presence of strong acids, alkalis or oxidising agents										
Toxicological Data	TOXICOLOGICAL INFORMATION										
Exposure	<ul style="list-style-type: none">• <i>NON-TOXIC</i> to humans, animals, plants or bacteria										
Ingestion	<ul style="list-style-type: none">• Will not normally irritate sensitive tissues through either transient or prolonged contact• Ingestion of small quantities of the product is unlikely to cause any undesirable effect. Ingestion of large quantities of the product may result in diarrhoea										
Inhalation	<ul style="list-style-type: none">• Should not be used for long periods in enclosed places - natural ventilation is adequate										
Exposure	EXPOSURE CONTROLS AND PERSONAL PROTECTION										
Personal protection	<ul style="list-style-type: none">• Contains no hazardous, toxic or volatile components• Safe to use without protective clothing, however, local health and safety regulations and working practices should be observed and protective clothing worn where prescribed. (the risk associated with the task being performed and the contaminants will require the use of appropriate protective clothing, including gloves, waterproof overalls, boots, goggles, suitable filter masks or respirators.)										
Eyes	<ul style="list-style-type: none">• Rinse with water										
Skin	<ul style="list-style-type: none">• Rinsing with water after use is advisable										
Handling	HANDLING AND STORAGE										
Storage	<ul style="list-style-type: none">• No specific precautions are required• No specific precautions are required										
Transport	TRANSPORT INFORMATION										
	<ul style="list-style-type: none">• Transportation within the EU or USA does not require any special precautions, no prescribed label or specified packaging group										
Leaks and Spills	ACCIDENTAL RELEASE MEASURES										
	<ul style="list-style-type: none">• No specialist handling or control procedures are required. Product may be washed away with water and not cause harm to drains, sewers or natural water courses										
Product	FIRE HAZARD AND EXTINGUISHMENT MEASURES										
	<ul style="list-style-type: none">• Non-combustible, water based, may be used in the presence of open flames										
Bio-degradable	ECOLOGICAL INFORMATION										
	<ul style="list-style-type: none">• 100%• Non-hazardous to the environment and non-toxic to plants and animals										
Product	DISPOSAL										
Container	<ul style="list-style-type: none">• Dispose in accordance with local regulations, where permitted may be added to sewage system (with generally beneficial effect)• Made from HOPE and should be returned or re-cycled										
Policy	DEVELOPMENT POLICY										
	<ul style="list-style-type: none">• Hi-Bar (UK) Ltd has a policy of continuous product development and information contained herein may change without notice. Contact Hi-Bar (UK) Ltd for latest details										
Date Sheet	<ul style="list-style-type: none">• Reference: LK-301, revision:1,00 date: 22/02/1996										

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