


Property of Oil Spill Response 	Document Title United Kingdom Continental Shelf Dispersant Stockpile (UKDS) Logistics Planning Guide (LPG)	Document Number OSRL-OPER-PLA-00904	
		Revision	4



Logistics Planning Guide (LPG)
United Kingdom Continental Shelf Dispersant Stockpile (UKDS)

REVISION HISTORY

Revision	Date	Description	Author(s)	Reviewer	Approval
00	26/09/2018		Dave Redington	Simon McCosh	Ian Midgley
01	10/07/2019		Dave Redington	Andrew West	Ian Midgley
02	04/02/2021	Template Change and Information Review	Tawirat Bates	Simon McCosh	Øistein Dahlslett
03	06/10/2021	Information Update	Tawirat Bates	Dave Redington	Øistein Dahlslett
04	06/01/2025	Periodic Review & removal of AIR component	Ken Church	Dave Singleton	Øistein Dahlslett

Contents

1. Introduction	5
1.1. Disclaimer	5
1.2. Service Level Agreement	5
1.3. Notification and Callout	5
1.4. Purpose	7
1.5. Audience	7
1.6. United Kingdom Continental Shelf Dispersant Stockpile Overview	7
2. Mobilisation	9
2.1. Storage Locations	9
2.2. Equipment Inventories	10
2.3. General Considerations	10
2.4. Tasks completed by OSRL for all equipment during a mobilisation	11
2.5. Documentation	11
2.6. Dangerous Goods	11
2.7. Safety Data Sheets	12
2.8. Global Harmonised System (GHS) and Labelling of Chemicals	13
2.9. Mobilisation Times	13
2.10. Dispersant Spillage Instructions	13
3. Equipment Transportation	14
3.1. Consignment Tracking Information	14
3.2. Road Transport	14
3.3. Sea Transport	15
3.3.1. Transporting as Cargo by Sea	16
3.3.2. Sea Fastening	16
3.3.3. Mobilisation by Sea – Lines of Responsibilities	16
3.3.4. Dispersant Application at Sea	18
4. Equipment	19
4.1. Dispersant	19
4.2. TC3 Helo Dispersant Spray System	19
4.3. Boat Spray 50 Dispersant Spray System & AFEDO Nozzles	19
4.4. Stockpile Support Equipment	20
4.5. Equipment Storage	21
4.6. Secondary Storage Weekly Checks	22
5. Reverse Logistics	22
5.1. Dispersant Re-supply	22

6. Glossary 24

6.1. Terminology..... 24

6.2. Abbreviations..... 24

7. Reference documents 25

Annexes

ANNEX A Going Away (GA) Box Inventory 26

ANNEX B Slickgone NS Safety Data Sheet..... 27

ANNEX C IBC Specifications 32

ANNEX D Dispersant Spillage Instructions 34

List of Figures

Figure 1 - Activation Procedure Card	5
Figure 2 - Communications Flow.....	6
Figure 3 - Map of Stockpile Locations	9
Figure 4 - IBC Lashing	15
Figure 5 - Pictogram of OSRL's and WO / IO Responsibilities - Mobilisation by Sea	17
Figure 6 - TC3 Helo Dispersant Helibucket.....	19
Figure 7 - Boatspray 50 Vessel Dispersant Delivery System	20
Figure 8 - AFEDO Nozzles	20
Figure 9 - Primary Storage Support Equipment	21
Figure 10 - Secondary Storage Location Support Equipment	21

List of Tables

Table 1 - Information on Stockpile Locations	9
Table 2 - Equipment Details at Each Stockpile.....	10
Table 3 - Equipment Replacement Cost.....	10
Table 4 - Dangerous Goods in UKDS Stockpile.....	12
Table 5 – Slickgone NS Dispersant Hazard Code.....	13
Table 6 - Breakdown of Responsibilities (Deployment by Sea)	17
Table 7 - Dispersant Re-supply Information	22
Table 8 - Supporting Documents for Mobilisation.....	25

1. Introduction

1.1. Disclaimer

The information contained within this document is for guidance and is correct at time of writing. During an exercise or emergency response, all information should be verified with OSRL to ensure the latest information is used for the mobilisation and onwards transportation of equipment.

1.2. Service Level Agreement

Oil Spill Response Limited (OSRL), together with its Affiliates is an industry owned and funded joint initiative, providing industry with the capability to better respond to incidents world-wide.

Through its relevant Affiliate companies (OSRL, together with its Affiliates shall hereafter be referred to as “OSRL”), OSRL provides the industry with the equipment, expertise and capability to better respond to incidents globally.

The United Kingdom Continental Shelf Dispersant Stockpile (UKDS) is an OSRL Supplementary Service for use in UK waters only!

1.3. Notification and Callout

Any component of the UKDS must be mobilised through the Southampton Preparedness and Response Centre (SPARC) by contacting a Duty Manager at +44 23 8033 1551. The SPARC is contactable and manned from 0600 – 1800hrs Monday to Friday to ensure your call is dealt with directly. During out of hours, the operator will contact a Duty Manager (DM).



Figure 1 - Activation Procedure Card

In the event of an Incident where the Well Owner / Incident Owner (WO / IO) is considering mobilising the UKDS, OSRL should be notified immediately using the telephone number shown above and providing the basic information listed;

- Initial contact person - Telephone, fax and email information
- Location, source and time of spill
- Weather
- Company – Address, telephone, fax number etc
- Oil volume of the spill
- Oil type and Characteristics

The following steps will then need to be followed, the OSRL Duty Manager (DM) will;

- Call back within 10 minutes (24 hours/day)
- Have extensive response experience
- Have access to a wide range of planning and predictive tools
- Act as the initial primary point of contact for the WO / IO
- Verify that the caller is a subscriber to the UKDS service
- Check that the location of the assistance is within terms of the UKDS membership

The initial discussion between the OSRL DM and the WO / IO will include;

- Scenario of spill
- UKDS assets required
- Location UKDS assets to be mobilised from
- Transportation mode (air/sea/land)
- Special logistics/permits required for mobilisation
- Additional oil spill response equipment required

The OSRL DM will forward the following documentation to the WO / IO based on the conversation above. The WO / IO will need to complete the following paperwork. Signatures are required, so paper copies are used.

- Notification Form (OSRL-OPER-FOR-00173 Rev10¹), can be found on OSRL Website or DM will send after initial phone call)
- Mobilisation / Authorisation form (OSRL-OPER-FOR-00172 Rev8¹), can be found on OSRL Website or DM will send after initial phone call)

The mobilisation of equipment will continue as described in this document (Logistics Planning Guide – United Kingdom Continental Shelf Dispersant Stockpile - OSRL-OPER-PLA-00904), with continued communications between OSRL and the WO / IO, but the ‘Notification’ process as described above, has been completed. OSRL will ensure that the communications flow shown below in Figure 2, is followed:

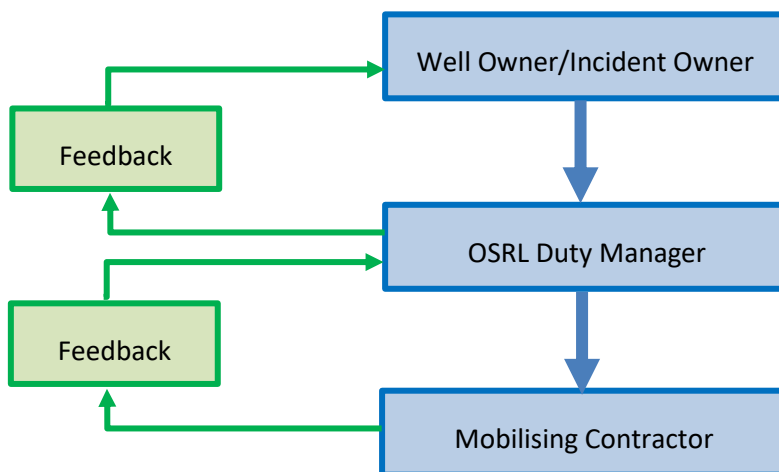


Figure 2 - Communications Flow

¹ Revision numbers referenced in the document are the latest at the time of publication. During a mobilisation the Revision number of documents sent to the WO / IO may be higher than that shown here BUT should never be lower

1.4. Purpose

This Logistics Planning Guide (LPG) is an aid to the planning and understanding of the processes for the mobilisation and initial deployment phases of the UKDS. This helps to ensure that operational logistics capability is delivered on time, in the right quantity and correct configurations, in a fully serviceable condition and crucially, to the right location. The guide covers details of the following:

- Equipment storage
- Storage medium (containers and types etc.)
- Potential transport methods (air, road and sea)
- Handling requirements
- Documentation
- Re-supply
- Lines of responsibility

1.5. Audience

The LPG is designed to be a simple to use, ready reference document for use by OSRL Response and Logistics staff and WO / IO's Logistics staff, whilst also providing a structured overview for management.

1.6. United Kingdom Continental Shelf Dispersant Stockpile Overview

The UKDS is an OSRL supplementary Service.

OSRL owns, stores and maintains the dispersant and associated support equipment (Equipment) in a response ready state, providing the WO / IO with readily available Equipment, logistical support and technical support when required.

500 m³ of dispersant, 2 x TC3 Heli spray units and 2 x Boat Spray 50 vessel application systems are pre-positioned at two locations. The Equipment is transportable by road, air and sea for deployment. Any UKDS Member may request 100% of the stockpile at any time.

Key facts:

- UKDS provides a total of 500 m³ of Slickgone NS dispersant to the subscribing Member, broken down by location as follows; 200 m³ at Inverness and 300 m³ at Scalloway, Shetland Islands
- Total of 2 x Going Away (GA) Boxes (1 at each Primary storage location) containing associated support equipment
- 100% of the stockpile can be mobilised for a single incident
- Dispersant type has been approved for the United Kingdom Continental Shelf (UKCS) region
- Any Member of OSRL can subscribe to the UKDS via a supplementary agreement
- The WO / IO has full responsibility for the approval and application of the dispersant, however OSRL will assist as required
- OSRL will arrange stockpile resupply as soon as dispersant has left the storage warehouse
- WO / IO is responsible for insurance and freight from Primary Storage, OSRL will assist if required

- The Equipment is a sale to the WO / IO on mobilisation from the Primary Storage².
- Following mobilisation of the Equipment from the Primary Storage, OSRL will arrange resupply of the Equipment. The Equipment purchase costs from the supplier associated freight and duties to replenish the Equipment to the Primary Storage will be invoiced to the WO / IO.

² *This is true at the time of writing. Updates to this will be included in the subsequent LPG versions. Please seek OSRL DM's discretion.*

2. Mobilisation

2.1. Storage Locations

The UKDS stockpile locations can be seen in **Error! Reference source not found.** below. Additional location and contact information can be found Table 1.



Figure 3 - Map of Stockpile Locations

Table 1 - Information on Stockpile Locations

Country	Address	Type and Volume	Notes
UK	Scalloway Harbour Office Saga Buildings Blacksness Scalloway ZE1 0TQ	Slickgone NS 300 m ³	<p>The Harbour Master has access to forklifts. The dispersant will either be mobilised to Scalloway Port, Lerwick Port, Sumburgh airport or a destination of the WO / IO's choosing.</p> <p>Streamline Hauliers are the usual freight company who transport from the Scalloway Warehouse to Sumburgh Airport or Lerwick Port. Streamline will supply a forklift if requested. Lerwick Port Authority also have a forklift at Lerwick port.</p> <p>If the dispersant is delivered to Sumburgh Airport, the Sumburgh Fire Service are required to escort the freight onto airside at the Virkie Apron gate.</p>
UK	17A Dalcross Ind Est Inverness Highland IV2 7XB	Slickgone NS 200 m ³	<p>There is a forklift located at the warehouse. The dispersant will either be mobilised to Inverness port, Inverness airport or a destination of the WO / IO's choosing.</p> <p>Woody's Express are the contracted freight company who transport from the Inverness warehouse to Inverness Airport or Inverness Port. Woody's Express can provide a forklift to unload if requested.</p>

2.2. Equipment Inventories

Table 2 - Equipment Details at Each Stockpile

Inverness	Scalloway, Shetland Islands
200 x Slickgone NS 1000 litre IBCs	300 x Slickgone NS 1000 litre IBCs
Boat Spray 50 vessel spray system	Boat Spray 50 vessel spray system
TC3 helo spray system	TC3 helo spray system
Forklift truck	Forklift truck
GA box (contents in ANNEX A)	GA box (contents in ANNEX A)
IBC sump	IBC sump
1000 litre spillage bin	1000 litre spillage bin
2 x spare empty IBCs	1x spare empty IBCs

2.3. General Considerations

The following should be considered when mobilising any of the equipment packages:

- Which are the nearest stockpile locations to the incident area?
- What is the time and risk differential between mobilisation by air, mobilisation by sea or mobilisation by road?
- Any lead time to mobilise the required vehicles / vessels / aircraft to the storage location?
- What are the local documentation requirements (packing lists, pro-forma invoices, load summary, Shipper's Declaration for Dangerous Goods (for GA box only), Safety Data Sheets (SDS), Commercial Invoices)?
- Are there WO / IO representatives available at receiving airports and ports?

Table 3 - Equipment Replacement Cost³

Equipment	Cost per IBC/item (USD)	Quantity in Stockpile	Total Cost in Stockpile (USD)
Slickgone NS	\$ 3,100.00	500	\$ 1,550,000.00
GA Box	\$ 6,600.00	2	\$ 13,200.00
Boat Spray 50 vessel spray system	\$ 10,050.00	2	\$ 20,100.00
TC3 helo spray system	\$ 37,500.00	2	\$ 75,000.00
		TOTAL	\$ 1,658,300.00

³ This is true at the time of writing. Updates to this will be included in the subsequent LPG versions. Please seek OSRL DM's discretion.

2.4. Tasks completed by OSRL for all equipment during a mobilisation

OSRL will arrange the loading of the Equipment ready for initial road freight. In accordance with the UKDS supplementary agreement⁴, it is the WO / IO's responsibility to insure and freight the Equipment from the Primary Storage location, to either a temporary secondary storage location or onward to the WO / IO's incident location. However, OSRL has freight relationships (as listed in Table 1) and would assist or arrange freight to the nominated delivery point (NDP), which may be either an airport of embarkation (APOE) or seaport of embarkation (SPOE), or direct to the WO / IO's location if requested.

- Provide a focal point to support the WO / IO and any ongoing operations 24/7
- Supply the shipping and customs documentation as required for the incident destination whether by road, sea or air from the storage locations
- If required, assist with initial road transport to mobilise the Equipment to the nominated airport or port
- If required, provide transport routes, timings and costs
- In the event of a large incident, OSRL will manage the Dispersant Logistics Plan in order to monitor dispersant freight movements, deliveries and usage at the incident location so adequate dispersant is available to the WO / IO at the incident
- OSRL will organise the resupply of purchased dispersant back to the Primary Storage location

If requested by the WO / IO, OSRL will ensure that the required equipment is mobilised to the NDP, which may be either an APOE or SPOE as agreed with the WO / IO. Upon notification from the WO / IO, OSRL will start working with our cargo charter brokers to identify suitable methods to mobilise the requested Equipment. Any costs and routings will be confirmed with the WO / IO in writing prior to mobilisation.

2.5. Documentation

OSRL will prepare the following documentation (in English) as part of standard procedures:

- Packing lists
- Pro-forma/Commercial/Customs invoices as required
- Load summary
- Shipper's Declaration for Dangerous Goods (for GA box only)
- Safety Data Sheets

It is the WO / IO's responsibility to provide OSRL with the following information to mobilise the equipment:

- Consignee details (name, contact number and address of the site)
- Notifying party (Logistics company supporting the shipment)

2.6. Dangerous Goods

Information is key to any safety program, including for dangerous goods in transport. Through Dangerous Goods Regulations (DGR) and comprehensive training programmes, International Air

⁴ This is true at the time of writing. Updates to this will be included in the subsequent LPG versions. Please seek OSRL DM's discretion

Transport Association (IATA) and the International Maritime Organisation (IMO) ensure that shippers, forwarders, and carriers have the tools and resources to ship dangerous goods safely.

Compliance with the DGR requires specific training. The successful application of regulations concerning the transport of dangerous goods greatly depend on the appreciation by all individuals concerned of the risks involved and on a detailed understanding of the Regulations. This can only be achieved by properly planned initial and recurrent training programs.

All equipment has been checked against compliance with the below regulations:

- **ADR** European Agreement concerning the International Carriage of Dangerous Goods by Road
- **ADN** European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
- **IMDG Code** International Maritime Dangerous Goods Code
- **IATA DGR** International Air Transport Association Dangerous Goods Code
- **ICAO** International Civil Aviation Organisation Technical Instructions for the Safe Transport of Dangerous Goods by Air.

Shipper's Declaration for Dangerous Goods for the outward transport of equipment will be provided by OSRL where required.

Table 4 - Dangerous Goods in UKDS Stockpile

Type of equipment	DG by Air	DG by Sea	DG by Road	UN Number / Proper Shipping Name / DG Class	DG Note required	Notes
AFEDO Boat Spray, Diesel Transfer Pump, TC3 Helo Dispersant Helibucket	YES	YES	NO	UN3528 / MACHINERY, INTERNAL COMBUSTION, FLAMMABLE LIQUID POWERED / 3	<ul style="list-style-type: none"> • Yes (Air) • Yes (Sea) • No (Road) 	Declaration and hazard label by air and sea, not by road.

Dispersant itself is not classed as Dangerous Goods for transport by road, sea or air and is not regulated as such. However, under ADN regarding transporting by European inland waterways, dispersants are regulated if their flash point is between 60 °C and 100 °C (typically this is the range into which dispersants' flash point falls). Scenarios leading to dispersant transportation on European inland waterways are likely to be very limited. Under the UN classification for transportation, dispersants are categorised as Packing Group III (least danger).

2.7. Safety Data Sheets


The SDS information below covers the dispersant currently held by the UKDS service. This information was correct at the time of inclusion, but WO / IO can obtain up to date copies of the SDS from OSRL or the dispersant manufacturer. The SDS follows an internationally agreed 16-section format and provides information on chemical products that help users of those chemicals to produce a risk assessment. They describe the hazards the chemical presents, and give information on handling, storage and emergency measures in case of an accident. Safety Data Sheets will be provided as appropriate within the GA boxes and are intended to provide personnel with procedures for handling or working with that substance in a safe manner. Please see ANNEX B

2.8. Global Harmonised System (GHS) and Labelling of Chemicals

The United Nations Globally Harmonised System (GHS) provides a voluntary agreement for the classification and labelling of chemicals. GHS becomes legally binding through a suitable national or regional legal mechanism. GHS not to be confused with Harmonised Systems Codes (HS Codes).

There is no risk to human health or the environment whilst dispersants are stored in their correct packaging, aided by effective spillage mitigation measures. The risk of exposure or potential environmental impact only occurs in cases of spillages, handling and the operational application of the product. More recent packaging labels and SDS may be marked with the signal words 'Danger' or 'Warning' and carry UN GHS pictograms to identify the hazards. UKDS Slickgone NS IBC's carry the following pictogram:

Table 5 – Slickgone NS Dispersant Hazard Code

Pictogram	Signal Word	Hazard Statement
	Danger	<ul style="list-style-type: none"> • May be fatal if swallowed and enters airways

2.9. Mobilisation Times

It should be noted that due to the variations along the entire response chain for any equipment, it is extremely difficult to provide accurate mobilisation times. The Equipment is stored in a configuration suitable for common transport to ensure a time efficient response via all modes of transport.

OSRL would encourage early mobilisation of Equipment to allow the most efficient options for transport to be considered.

2.10. Dispersant Spillage Instructions

In the event of an inadvertent dispersant leak or spillage occurring between the Primary Storage and the incident location, the procedure is listed in ANNEX D and included in the GA box. Primary storage locations have 1000litre spill kits available and the GA boxes contain 90litre spill kits.

3. Equipment Transportation

3.1. Consignment Tracking Information

Consignment tracking is the process, procedures and associated technology used to give both the consignor and consignee visibility of items in transit, whether in real time or at last known location. Visibility of items in transit is crucial for pragmatic operational planning and execution. Knowing where items in transit are and when they will be available for use at the required location, including expected arrival date and time, helps ensure the efficient and effective co-ordination of available resources to maximise operational capability.

Tracking of items in transit is achieved by:

- The reporting of the arrival or departure of the item
- Recording the following:
 - Identification of the item
 - Location where observed
 - Time and date

This process can be electronic, manual and electronic, or entirely manual, depending on the location and availability of consignment tracking information systems and member companies' own installed systems.

3.2. Road Transport

WO / IO's planning teams should familiarise themselves with the specific procedures for each airport or seaport that has been identified for the loading and unloading of equipment. Potential difficulties are to be highlighted and mitigated where possible.

Availability of road transport assets, material handling equipment for loading and offloading including availability of equipment operators is to be included.

Road routes to and from APOE/SPOE and airports of disembarkation (APOD)/seaports of disembarkation (SPOD) are to be proved on the ground if possible, paying attention to the following:

- Overhead clearance
- Width limits
- Weight limits
- Road furniture constraints
- Turning restrictions
- Traffic flows
- Bridges (heights and weight limits)
- Tolls

All the Primary Storage locations have suitable hauliers or haulier retainer contracts, providing a haulier if the Equipment is to be transported to either an APOE/SPOE or onwards to the incident.

The following considerations must be observed prior to and during road transport:

- Liability insurance for both the dispersant value as well as potential environmental damage and pollution becomes the responsibility of the WO / IO following movement from the

Primary Storage location for UKDS. Additional insurance is not required for routine maintenance and mobilisation exercises where the dispersant is under the ownership of OSRL, as this is covered by the OSRL Marsh insurance policy⁵.

- IBCs must be single stacked when transported by road freight. Schütz Ltd advises full IBCs may be transported double stacked, however double stacking is likely to exceed trailer payload and axle weight distribution.
- To prevent IBC frame distortion during road transit on a flatbed type trailer, it is suggested IBCs are lashed over the top of the HDPE container but under the top metal frame, see Figure 4 below. Slight HDPE container distortion may occur when lashing is tightened.
- It is the responsibility of the freight carrier to secure the load in accordance with company or regional requirements. Any damage occurring to the load during transport, then the liability insurance will provide a financial means to make good any damage caused.



Figure 4 - IBC Lashing

3.3. Sea Transport

Mobilising Equipment by road freight then sea at a local port is the most likely transport scenario for the UKDS stockpiles. Dispersant IBC's can be transported by sea freight to the required destination. If dispersants are to be applied to the spilled oil from a vessel (vessel dispersant application), then a suitable vessel must be sourced to carry out such operations.

Inverness Stockpile

Woody's Express are the contracted freight company who transport from the Inverness warehouse to Inverness Port. Woody's Express will provide a forklift truck to unload if requested.

Scalloway Stockpile

The Harbour Master has access to forklift trucks. The dispersant will either be mobilised to Scalloway Port or Lerwick Port.

Streamline Hauliers are the usual freight company who transport from the Scalloway Warehouse to Lerwick Port. Streamline will supply a forklift if requested. Lerwick Port Authority also has a forklift truck at Lerwick port.

⁵ This is true at the time of writing. Updates to this will be included in the subsequent LPG versions. Please seek OSRL DM's discretion.

3.3.1. Transporting as Cargo by Sea

Dispersant IBCs can either be loaded for sea transport breakbulk as individual IBCs, loaded into DNV 2.7.1 (Offshore containers) or transferred into integrated ships tanks or ISO storage tanks. The pump package within the GA box may assist with any dispersant transfers.

Storage and transport of full IBCs in sea containers is dependent on forklift capabilities to determine whether single stack or double stack can be achieved.

- The requirement for specialised forklifts (reduced height mast / upright) in order to double stack (loading and unloading) in sea containers
- Ensure similar destination forklift capability is available

The following are WO / IO considerations:

- Charter the vessel/s and associated ships' agent
- Ensure all vessel port state clearances are carried out
- Form a contract with a stevedoring company to load equipment to vessel (details provided by OSRL)
- On site representative(s) to accept Equipment

The sea-fastening procedures will be the responsibility of the vessel crew. Welding of some equipment to decks may be required for safe at-sea storage.

3.3.2. Sea Fastening

The sea-fastening procedures will be the responsibility of the vessel crew. Welding of some equipment to decks may be required for safe at-sea storage

3.3.3. Mobilisation by Sea – Lines of Responsibilities

Find in Figure 5 a diagram of OSRL's and the WO / IO's responsibilities during the mobilisation process by sea. Table 6 shows a breakdown of responsibilities depending on tasks to be completed during the mobilisation process.



Figure 5 - Pictogram of OSRL's and WO / IO Responsibilities - Mobilisation by Sea⁶

Table 6 - Breakdown of Responsibilities (Deployment by Sea)⁶

Task	Responsibility	Cost incurred by	Resources required	Service providers required	Service provider mobilized by
Selection of Required Equipment	OSRL and WO / IO	OSRL (Charged to WO / IO)	Personnel	None	N/A
Load Equipment for Transport to Seaport	OSRL / OSRL Contractors	OSRL (Charged to WO / IO)	Road Haulage, Forklift	Warehouse Contractors / Road Haulage Company	OSRL
Charter Vessel	WO / IO	WO / IO	Vessel Charter	Vessel Charter Provider	WO / IO
Mobilise Cargo Handlers	WO / IO	WO / IO	Handlers	Cargo Handling Agent	WO / IO
Pass Equipment to Cargo Handlers	WO / IO	WO / IO	Handlers	Cargo Handling Agent	WO / IO
Load Vessel	Cargo Handlers	WO / IO	Handlers	Cargo Handling Agent	WO / IO

⁶ This is true at the time of writing. Updates to this will be included in the subsequent LPG versions. Please seek OSRL DM's discretion.

Task	Responsibility	Cost incurred by	Resources required	Service providers required	Service provider mobilized by
Export Customs Clearances	WO / IO	WO / IO	Personnel	Customs Agent	WO / IO
Unload Vessel	Cargo Handlers	WO / IO	Handlers	Cargo Handling Agent	WO / IO
Import Customs Clearances	WO / IO	WO / IO	Personnel	Customs Agent	WO / IO
Transport from Seaport	WO / IO	WO / IO	Road Haulage, Forklift	Road Haulage Company	WO / IO

3.3.4. Dispersant Application at Sea

When dispersants are being transported by sea on a vessel where dispersant application operations are planned to take place, the proper vessel would need to be sourced. Dispersants can either be loaded in its current storage medium (IBCs) or by transferring the dispersants into a larger integrated ship or ISO tank. The method chosen will depend on the availability of the sourced vessel and the operational directive of the response plan.

The GA box, (one at each location) that is part of the UKDS contains equipment designed to spray dispersants from a vessel. When sourcing for suitable vessel, the OSRL Duty Manager could be consulted for further input. However, general considerations for dispersant application vessels are:

- Vessel deck space to place equipment, ISO tanks and IBCs
- Vessel integrated tank storage volume
- Open deck to allow use of spray equipment
- Accommodation for responders

4. Equipment

4.1. Dispersant

The UKDS is primarily made up of 500m³ of [Slickgone NS](#), which is separated into 200m³ at Inverness & 300m³ at Scalloway in the Shetlands. Both these stockpiles are regularly maintained.

4.2. TC3 Helo Dispersant Spray System

OSRL hold 1 x TC3 at Inverness and 1 x TC3 at Scalloway. The TC3 is an aerial dispersant spray system suitable for spot slick treatment which uses type 3 dispersants. The TC3 has a dispersant operating capacity of 910 litres (200 Gallons) and dispersant application can be varied up to 455 litres/min (100 gallons/min). The applied spray swath width is up to 30 metres.



Figure 6 - TC3 Helo Dispersant Helibucket

4.3. Boat Spray 50 Dispersant Spray System & AFEDO Nozzles

OSRL also hold 1 x Boatspray 50 & AFEDO Nozzle system at Inverness and 1 x Boatspray 50 & AFEDO Nozzle system at Scalloway. The Boat Spray systems are small portable diesel-powered dispersant pump units which are designed to be operated from small tugs, workboats and other specialised vessels. The systems are capable of spraying either concentrated or diluted dispersant. Typical application is from small to medium size vessels (15m-40m+) operating inshore. The WO / IO should familiarise themselves with the latest guidance provided by [International Petroleum Industry Environmental Conservation Association \(IPIECA\)](#).



Figure 7 - Boatspray 50 Vessel Dispersant Delivery System

The AFEDO Nozzle is a specially designed nozzle which creates an even drop-out spray pattern and provides an effective alternative to spray arms.



Figure 8 - AFEDO Nozzles

4.4. Stockpile Support Equipment

UKDS stockpiles are aligned to ensure suitable stockpile response support equipment is available at the primary and secondary storage locations in the event of a dispersant spillage as well as a means of transferring the dispersant into bulk storage with the high-volume diesel transfer pump with a flow rate of 870 L/min and associated hoses and valves. Figure 9 below illustrates a typical stockpile support equipment layout at the Primary Storage location.



Figure 9 - Primary Storage Support Equipment

The Primary Storage location is facilitated with a 1000 litre chemical spillage kit, a double IBC bund and a spare empty IBC. This equipment shall be located and maintained at the Primary Storage location. The spill kits contain spillage instructions and a wide range of equipment to deal with any dispersant spillages. The bin is located in an accessible location but should be relocated to a location of high-risk during IBC movements.

The GA box and one spare empty IBC will be mobilised with the first mobilisation of IBC's to support the stockpile during freight transport and onwards to the WO / IO's location. The GA box inventory is described in Annex A. If the WO / IO's storage location becomes fragmented, the GA box and spare empty IBC shall remain with the largest volume of dispersant. Figure 10 below illustrates the Equipment that will be loaded with the first IBC road freight load.



Figure 10 - Secondary Storage Location Support Equipment

4.5. Equipment Storage

If Equipment is mobilised from the Primary Storage location; either temporarily located at a port, airport, on a trailer or aboard a vessel – the following considerations must be observed:

- Temporary shelter to protect the dispersant from direct sunlight, high humidity and saltwater. If solid shelter is unavailable, opaque sheeting should be applied to cover the IBCs
- Considerations should be observed if storage location poses a potential environmental impact; such as gradient run off or open drains etc. If drainage systems are in the vicinity of the dispersant, then suitable drain covers must be utilised. Drain covers are available in the GA box, see ANNEX A
- IBC relocated from the Primary Storage location must be accompanied with a spare empty IBC, gravity transfer hose and the GA box

4.6. Secondary Storage Weekly Checks

On mobilisation of the Equipment from Primary Storage; this could be during freight, temporary laydown area, at the incident location, in bulk storage or on a vessel – the following weekly checks should be observed:

- Ensure there are no dispersant leakages from the containers or the discharge valves
- Ensure the Equipment is secure and weather tight, ensure either solid shelter or opaque sheeting is maintained
- Ensure IBCs are stored in accordance with manufacturer’s instructions and away from direct sunlight)

5. Reverse Logistics

In accordance with the UKDS Supplementary Agreement, the Equipment is a sale to the WO / IO at the Primary Storage location⁷. The lead time to resupply the complete UKDS stockpile will take a number of weeks. OSRL are obliged to ensure the UKDS is restocked as soon as possible in the event another UKDS Member requires Equipment, or if the WO / IO requires additional Equipment.

If the WO / IO no longer requires the Equipment at the incident, OSRL will consider repurchasing the Equipment (depending on the warehouse resupply status) from the WO / IO following successful dispersant efficacy testing. OSRL will assist with samples and delivery to test laboratory. The WO / IO shall cover all costs associated with testing, return freight to the Primary Storage location. If any of the Equipment is subject to excessive corrosion or general damage, the WO / IO shall bare the associated costs to ensure the Equipment is relocated in a suitable standard.

5.1. Dispersant Re-supply

Table 7 - Dispersant Re-supply Information

Supplier	Dispersant	Delivery Information
Dasic International	Slickgone NS	<u>Production Capacity</u>

⁷ This is true at the time of writing. Updates to this will be included in the subsequent LPG versions. Please seek OSRL DM’s discretion.

<p>Winchester Hill Romsey Hampshire SO51 7YD United Kingdom Tel: +44 (0) 1794 512 419 Email: sales@dasicinter.com</p>		<p>On the assumption that Dasic can supply in bulk road tankers and that such road tanker capacity is available, Dasic can have 30,000 litres DASIC Slickgone NS available on the first day. A further 60,000 litres can be available by the next day. Supply in IBCs will be dependent on the current available stock of empty IBCs and new stock could take 3-5 days to arrive from the manufacturer.</p> <p>Dasic ongoing production capacity for supply in bulk road tankers is 108,000 litres per 24 hours. It would take 7 to 10 days to ramp up to this capacity. For supply in 1000 litre IBC's, this capacity would reduce to 54 cubic metres per 24 hour shift.</p>
<p>Notes</p>	<ol style="list-style-type: none"> 1. Capacity is based on the assumption that raw material suppliers can keep up supplies. True production capacity could be reduced dramatically, especially if dispersant is also being sourced from multiple manufacturers. Most dispersant manufacturers use sodium di iso octyl sulphosuccinate and sorbitan monooleate surfactants in their formulations. If several companies are sourcing these materials at the same time, the supply chain would be severely strained. Do not add together the production capacities quoted by the various dispersant manufacturers. 2. All volumes listed above would be delivered in 1000 litre IBCs. 3. OSRL must purchase dispersants from the Dasic during resupply, then either restock the UKDS or sell it to the WO / IO. The WO / IO cannot purchase direct from Dasic (in accordance with end user indemnity agreements). There are no purchase restrictions with Dasic products, as there are no end user indemnities required. 	

6. Glossary

Logistics terminology used within the document is, where possible, universal. For the purposes of the context of the document the following simplified terms and abbreviations are used:

6.1. Terminology

Burn Plan – A model to plan and predict available, delivered and applied dispersant at location.

Deployment – Move and bring into effective action, i.e. deploying stores and Equipment to required destinations.

DNV 2.7.1 – Standards for Offshore containers, OSRL equipment referred to as DNV in this plan meets either DNV 2.7.1 (Offshore containers).

Equipment – The dispersant and stockpile support equipment.

Lead time - The period of time from when the item is ordered to when the item is delivered to and received at the final destination ready for use (technically Supply Lead Time). The understanding of lead times is a critical management component.

Logistics - Management and flow of resources between point of origin and point of consumption.

Maintenance - The process of preserving a condition in respect of Equipment, associated items and other items in storage therefore ensuring items are fit for issue and subsequent use. Including planned and unplanned activities.

Material Handling Equipment - Equipment that relates to the movement, storage, control and protection of materials, goods and products.

Mobilisation - Make something movable or capable of movement, i.e. making stores and Equipment ready for deployment.

Primary Storage – The primary long-term storage warehouse location of the Equipment prior to mobilisation.

Recovery - Move items back from deployment location to home storage base location.

Secondary Storage – Any Equipment location following mobilisation from Primary Storage; this could be during freight, temporary laydown area, at the incident location, in bulk storage or on a vessel.

6.2. Abbreviations

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road

DGR – Dangerous Goods Regulations

DOM – Date of Manufacture

GA Box – Going Away Box

GHS – United Nation’s Global Harmonised System

IATA – International Air Transport Association

IBC – Intermediate Bulk Container

IPIECA – International Petroleum Industry Environmental Conservation Association (IPIECA)

LPG – Logistics Planning Guide

Woody's Express - MacRitchie Highland Distribution

NDP – Nominated Delivery Point

OSRL – Oil Spill Response Limited

SDS – Safety Data Sheet

SPOD – Seaport of Disembarkation

SPOE – Seaport of Embarkation

UKCS – United Kingdom Continental Shelf

UKDS – United Kingdom Dispersant Stockpile

WO / IO – Well Owner / Incident Owner

7. Reference documents

The below table identifies the documents to assist the WO / IO during a mobilisation (correct at time of printing).

Table 8 - Supporting Documents for Mobilisation

Document no.	Document Title
OSRL-OPER-FOR-00172	Mobilisation Authorisation Form
OSRL-OPER-FOR-00173	OSRL Notification Form
OSRL-OPER-GUI-00192	B727 Mobilisation and Logistics Plan
OSRL-OPER-GUI-00709	Hercules Mobilisation and Logistics Plan

ANNEX A Going Away (GA) Box Inventory

- 1 x Large storage box
- 1 x High volume centrifugal diesel pump unit, mounted on a wheeled trolley
- 3 x 6m 2" hoses with 2" female-male camlock nylon connectors
- 1 x 1m plastic/poly pick up tube with 2" female camlock and 2" ball valve
- 1 x 1m x 2m pump bund
- 1 x GA spill kit (90 litres)
- 1 x Bale of absorbent pads
- Spares & Ancillaries Storage Box
 - 2 x 2" ball valve with 2" female-male connections
 - 1 x 2" T-piece with 2" male inlet and 2 x 2" female outlets
 - 1 x 2" double male adapter
 - 1 x 2" double female adapter
 - 1 x IBC Cap Spanner
 - 1 x 5lt diesel can
 - 1 x Toolkit
 - 1 x Medium funnel
 - 1 x pack of medium cable ties
- 1 x Dispersant effectiveness test kit
- 1 x bag of rags
- 2 x drain covers

ANNEX B Slickgone NS Safety Data Sheet

SLICKGONE NS



SAFETY DATA SHEET

1 Identification of the substance or preparation and the supplier

Product Name: **SLICKGONE NS**
 Datasheet Number: F315 1.0.0
 Recommended Use: MAFF approved Type 2 / Type 3 oil dispersant concentrate for treating marine oil spills
 Chemical Description: Solution of surfactants in low aromatic petroleum distillate
 Packaging: 25 and 200 litre steel containers, 1000 litre IBC's with fluorinated polythene liners
 Name of Supplier: Dasic International Ltd
 Address of Supplier: Winchester Hill
 Romsey
 Hampshire SO51 7YD
 UK
 Telephone: +44 (0) 1794 512419
 Fax: +44 (0) 1794 522346
 Responsible Person: Contact company
 Emergency Telephone: +44 (0) 1794 512419

2 Composition/information on ingredients

Chemical Name	Concentration	CAS Number	EC Number	R Phrases	Symbols
Anionic surfactant	1- 10% w/w	577-11-7		36/38	Xi
Odourless kerosene	>50% w/w	64742-47-8	649-422-00	65	Xn

3 Hazards identification

- Low order of toxicity and flammability
- Not hazardous according to current CHIP Regulations
- Will support combustion and burn readily once ignited
- Mildly irritating to eyes
- Prolonged skin contact will result in defatting of the skin, leading to irritation, and in some cases, dermatitis
- Flash point 72 deg C (CC) at 100 per cent by weight

4 First aid measures

Contact with skin

- Remove contaminated clothing immediately and drench affected skin with plenty of water. Then wash with soap and water
- Contaminated clothing should be laundered before reuse

Contact with eyes

- If substance has got into eyes, immediately wash out with plenty of water for at least 15 minutes
- Irrigate eyes thoroughly whilst lifting eyelids
- Seek medical advice

Ingestion

- Do not induce vomiting because of risk of aspiration into the lungs. If aspiration is suspected obtain immediate

Date of Last Change 10/12/2002

1

SLICKGONE NS

4 First aid measures (....)

- medical attention
- Rinse mouth with water (do not swallow)
- Give plenty of water to drink
- Seek medical advice

Inhalation

- Remove patient to fresh air
- Seek immediate medical attention

General

- When in doubt or symptoms persist, seek medical attention
 - Never give anything by mouth to an unconscious person
 - Note for medical personnel: Medical supervision for 24 - 48 hrs is strongly recommended if aspiration could have occurred
-

5 Fire-fighting measures

- Upper explosive limit 7.0 % (in air)
 - Lower explosive limit 0.6 % (in air)
 - Flash point 72 deg C (CC) at 100 per cent by weight
 - In case of fire use water, foam, carbon dioxide or dry agent (S43)
 - Keep container(s) exposed to fire cool, by spraying with water
 - Consider evacuation
 - Wear Breathing Apparatus
-

6 Accidental release measures**Immediate Actions**

- Shut off all ignition sources
- Wear protective clothing as per section 8

Clean Up Actions

- Absorb spillage in suitable inert material
- Recover the product where possible
- Flush spill area with copious amounts of water

Special Precautions

- Do not allow to enter public sewers and watercourses
 - If polluted water reaches drainage systems or water courses, immediately inform appropriate authorities
 - Seek expert advice for removal and disposal of all contaminated materials and wastes
-

7 Handling and storage**Handling**

- Wear protective clothing as per section 8
- Keep away from sources of ignition - No Smoking (S16)

Storage

- Keep only in the original container in a cool, well ventilated place away from oxidising substances (S3/9/14/49)

Specific use(s)

- Use only as recommended in the Dusic technical literature
-

Date of Last Change 10/12/2002

2

SLICKGONE NS

7 Handling and storage (....)

8 Exposure controls and personal protection

Exposure Limits

Odourless kerosene

- OES / LTEL - ppm 1000 mg/m³

Exposure controls

- The undiluted product must not be used in a confined space without good ventilation

Occupational exposure controls

- Wear suitable protective clothing, including eye/face protection and gloves (PVC are recommended)
 - Respiratory protection may be required under exceptional circumstances when excessive air contamination exists
-

9 Physical and chemical properties

- Odour: Characteristic odour
 - Appearance: Liquid, brown, clear
 - pH Neutral at 100 % concentration
 - Boiling point 192 °C to 192+ °C at 760 mm /Hg
 - Vapour pressure 0.04kPa at 20 deg C
 - Vapour density 0.0076 g/cm³ at 20 deg C
 - Freezing point <-10 °C at 760 mm/Hg
 - Dispersible
 - Density 0.87 g/cm³ at 20 deg C
 - Flash point 72 deg C (CC) at 100 per cent by weight
 - Auto-ignition point 230 deg C at 760 mm Hg
 - Upper explosive limit 7.0 % (in air)
 - Lower explosive limit 0.6 % (in air)
 - Viscosity 30 - 60 centipoise at 0 deg C
-

10 Stability and reactivity

- This article is considered stable under normal conditions
 - Keep away from heat and sources of ignition
 - Incompatible with oxidizing substances, Incompatible with acid
 - Decomposition products may include oxides of sulphur and carbon
-

11 Toxicological information

Toxicological information

- Mildly irritating to eyes
 - Prolonged skin contact will result in defatting of the skin, leading to irritation, and in some cases, dermatitis
 - The ingestion of significant quantities may cause nausea/vomiting
 - The ingestion of significant quantities may cause damage to lungs
 - Inhalation of solvent vapours may give rise to nausea, headaches and dizziness
 - This is unlikely to occur when the product is used to treat oil spills in the open sea
-

SLICKGONE NS

12 Ecological information

Ecotoxicity

- This product has been tested for marine toxicity by the UK Ministry of Agriculture Fisheries and Foods and is approved as a Type 3 oil dispersant concentrate. It has also been tested and approved as a marine oil dispersant by the French government laboratory "CEDRE".

Persistence and Biodegradability

- The surfactant component of this product is 95% biodegradable when tested to EEC Directive 73/405/EEC as amended by 82/243/EEC. The whole product has been tested for ultimate biodegradability in the marine environment and the results have been accepted by the French government as part of their approval procedure for dispersants.

Bioaccumulation Potential

- Low bioaccumulation potential

13 Disposal considerations

Classification

- Disposal should be in accordance with local, state or national legislation

Disposal considerations

- This material and/or its container must be disposed of as hazardous waste
- Triple rinse drums prior to recycling or disposal

14 Transport information

Proper Shipping Name:

UN

UN No.:

Hazard Class:

Packing Group:

Road/Rail (ADR/RID)

ADR Hazard Class:

ADR subrisk:

Sea (IMDG)

IMDG Hazard Class.:

IMDG subrisk:

Air (ICAO/IATA)

ICAO Hazard Class.:

ICAO subrisk:

- Not classified as hazardous for road transport
- Not classified as hazardous for air transport
- Not classified as hazardous for marine transport

15 Regulatory information

Classification and labelling

- Not classified as hazardous for users

Date of Last Change 10/12/2002

4

SLICKGONE NS

16 Other information

(R36/38: Irritating to eyes and skin. R65: Harmful: may cause lung damage if swallowed.)

Use only in accordance with Dasic's use instructions. Do not use for other applications without first consulting the Dasic Technical Department for advice. The information contained in this safety data sheet is provided in accordance with the requirements of the Chemicals (Hazard Information and Packaging) Regulations.


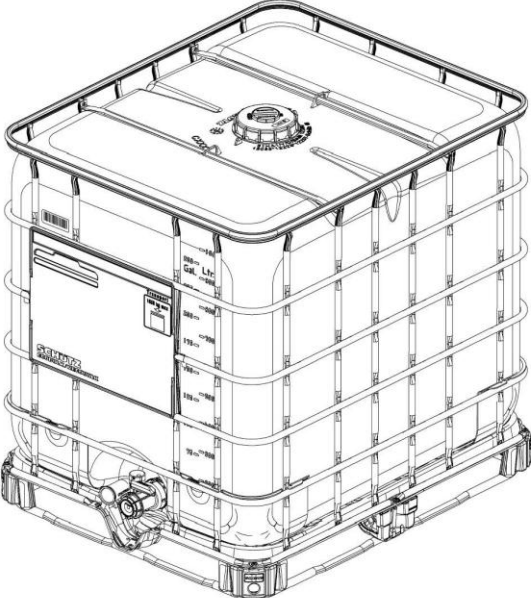
Although this product contains hydrocarbon solvent, its viscosity is higher than 40 seconds (3mm ISO cup, EN 535). It does not, therefore, carry a Harmful classification under UK CHIP Regulations 2002.


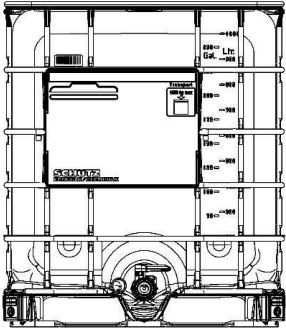
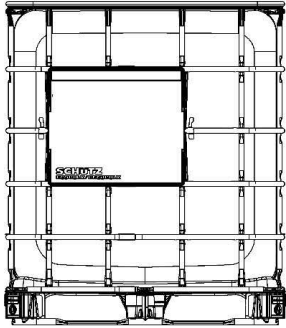
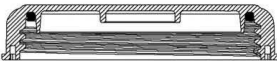
This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the Company's knowledge and belief, accurate and reliable as of the date indicated. However no warranty, guarantee or representation is made as to its accuracy reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.


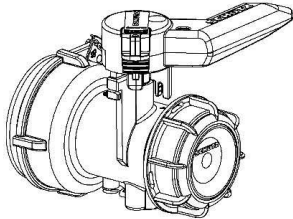
Date of Last Change 10/12/2002

5

ANNEX C IBC Specifications

Packaging - Specification ECOBULK			
Transportcontainer ECOBULK 1000 ltr. MX1000 UN EVOH Nat/150R TP Bfly 50 VI Met 3PCA/Steel frame 2-Pit LG:LG/TI		SCHÜTZ (UK) LIMITED Claylands Ave Dukeries Ind. Estate WORKSOP NOTTS S81 7BE UNITED KINGDOM	
Article-No.	4027214	Date	Mar 13, 2020 Page 1 / 3
			
This picture is for illustration purpose only and does not necessarily correspond to the specified product.			
Weights and measures			
Nominal Capacity	1,000 l		275 gal US
Brimful Capacity	1,060 l		280.027 gal US
Length	1,200 mm		47.240 in
Width	1,000 mm		39.370 in
Height with pallet	1,160 mm		45.670 in
Total weight approx.	56.5 kg		124.7 lbs US
Pallet			
Pallet type	Steel-framepallet, zincd		
Opening height	min. 90mm, 4-way entry		

Packaging - Specification ECOBULK			
Transportcontainer ECOBULK 1000 ltr. MX1000 UN EVOH Nat/150R TP Bfly 50 VI Met 3PCA/Steel frame 2-Pit LG:LG/TI		SCHÜTZ (UK) LIMITED Claylands Ave Dukeries Ind. Estate WORKSOP NOTTS S81 7BE UNITED KINGDOM	
Article-No.	4027214	Date	Mar 13, 2020
		Page 2 / 3	
Outer container			
Grid	Steel, galvanized		
Bottom plate	Steel, galvanized		
Corner protector	black		
Label plate	large - 6 field, with Schütz-Ticket		
additional label plate	back side - standard		
			
			
Inner container			
Rectangular blow molded tank of high density polyethylene			
Container	PE-HD, natural		
Permeation barrier	EVOH barrier		
Filling opening			
Screw cap	DN150 / 6", PE-HD, red		
O-ring gasket	TPE		
			

Packaging - Specification ECOBULK																											
Transportcontainer ECOBULK 1000 ltr. MX1000 UN EVOH Nat/150R TP Bfly 50 VI Met 3PCA/Steel frame 2-Pit LG:LG/TI		SCHÜTZ (UK) LIMITED Claylands Ave Dukeries Ind. Estate WORKSOP NOTTS S81 7BE UNITED KINGDOM																									
Article-No.	4027214	Date	Mar 13, 2020 Page 3 / 3																								
<table border="0"> <tr> <td style="padding-right: 20px;">Plug</td> <td>without Plug</td> </tr> <tr> <td colspan="2">Discharge opening</td> </tr> <tr> <td style="padding-right: 20px;">Outlet valve</td> <td>scr. butterfly-valve DN50/2"</td> </tr> <tr> <td style="padding-right: 20px;">Case</td> <td>PE-HD</td> </tr> <tr> <td style="padding-right: 20px;">Connection thread</td> <td>metric</td> </tr> <tr> <td style="padding-right: 20px;">Flap gasket / Ball gasket</td> <td>PP</td> </tr> <tr> <td style="padding-right: 20px;">Flange gasket</td> <td>FKM</td> </tr> <tr> <td style="padding-right: 20px;">Handle color</td> <td>grey, Handle protection</td> </tr> <tr> <td style="padding-right: 20px;">Screw cap</td> <td>PE-HD</td> </tr> <tr> <td style="padding-right: 20px;">Screw cap gasket</td> <td>PE, foamed</td> </tr> <tr> <td style="padding-right: 20px;">Screw cap color</td> <td>black</td> </tr> <tr> <td style="padding-right: 20px;">Outlet nozzle</td> <td>PE-HD</td> </tr> </table> <div style="text-align: center; margin: 10px 0;">  </div> <p>Features</p> <p>UN-Marking UN_31HA1/Y/MM YY/D/BAM12868-SCHÜTZ#/4056/1724/1060L/56KG/100KPA</p> <p>Heavy metals Concentration level of heavy metals (Pb, Cd, Cr VI and Hg) in packaging does not exceed 100 ppm</p> <p>Delivery Ready for filling. The customer or filler is responsible for testing the material compatibility of the filling material with the packaging</p>				Plug	without Plug	Discharge opening		Outlet valve	scr. butterfly-valve DN50/2"	Case	PE-HD	Connection thread	metric	Flap gasket / Ball gasket	PP	Flange gasket	FKM	Handle color	grey, Handle protection	Screw cap	PE-HD	Screw cap gasket	PE, foamed	Screw cap color	black	Outlet nozzle	PE-HD
Plug	without Plug																										
Discharge opening																											
Outlet valve	scr. butterfly-valve DN50/2"																										
Case	PE-HD																										
Connection thread	metric																										
Flap gasket / Ball gasket	PP																										
Flange gasket	FKM																										
Handle color	grey, Handle protection																										
Screw cap	PE-HD																										
Screw cap gasket	PE, foamed																										
Screw cap color	black																										
Outlet nozzle	PE-HD																										
This specification is produced and delivered according to the current status of the SCHÜTZ "Quality Management Standard for the Supply of Packaging Products" which can be viewed under the following link: www.schuetz.net/qmstandard																											

ANNEX D Dispersant Spillage Instructions

Safety

1. Safety is priority
2. PPE is to be worn in the event of any spillage
3. First aid kit located in the GA box
4. Eyewash bottle located in the GA box

Initial Actions

1. Raise alarm
2. Don PPE (located in GA box)
3. Apply putty to IBC breach if possible
4. Contain or reduce spread using absorbent pads and booms
5. Cover drains with putty mats or drain covers if IBC is not bunded
6. Transfer remaining dispersant into spare empty IBC, using transfer pipe

Secondary Actions

1. Inform HSEQ representative
2. Manage the spread of dispersant with spill kits, assisted by colleagues
3. Cordon off area and manage clean up
4. Notify relevant authorities if any dispersant makes its way into watercourses