

**1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**


Product Name:	DriFlow 3
Chemical Family:	Proprietary Blend
Application:	Dry Friction Reducer : For Industrial use
Company Name:	Downhole Chemical Solutions, L.L.C
Address:	1 Cowboys Way, STE 572
	Frisco TX 75034
Company Telephone:	469-466-1100
Emergency Telephone:	1-800-255-3924 (ChemTel)

**2. HAZARDS IDENTIFICATION**

**OSHA Classification 29CFR 1910.1200**

Health	Physical

**Hazard Symbols**



**Hazard Statements: WARNING!**  
 May form combustible dust concentrations in air.  
 Will make floor slippery when wet.

**Precautionary Statements**

Prevention	Response	Storage	Disposal
<p>Wear protective gloves/ protective clothing/eye protection/face protection. Keep work areas free of dust accumulation. Keep away from flames and hot surfaces. No smoking. Do not handle until all safety precautions have been read and understood. Obtain special instruction before use.</p>	<p>IN CASE OF FIRE: Use dry powder, alcohol-resistant foam, water spray, water in large amounts and CO2. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. For professional users only.</p>	<p>Store in well ventilated area. Keep Cool. Store locked up.</p>	<p>Dispose of contents/ container in accordance with local, state or federal agencies regulations.</p>

### 3. COMPOSITION INFORMATION ON INGREDIENTS

Ingredient	CAS No.	Weight %
Not Applicable, This product is a mixture		
*Certain ingredients and/or specific chemical identities may be withheld as a trade secret under the provisions of OSHA hazard communication standard 29 CFR 1910.1200		

### 4. 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.
Skin:	In case of contact, flush skin with soap and water for at least 15 minutes. Seek medical attention if irritation persists.
Eyes:	In case of contact flush eyes with plenty of water for at least 15 minutes and seek medical attention if irritation persists.
Ingestion:	Do not induce vomiting. Seek medical attention. Never give anything by mouth to an unconscious person.
Notes to Physician:	Not Determined

### 5. FIRE FIGHTING MEASURES

Fire Extinguishing Media:	Water Spray, Carbon Dioxide, Foam, Dry Chemical.
Special Exposure Hazards:	Containers can build pressure when exposed to fire/heat.
Special Protective Equipment for Fire Fighters:	Full protective clothing and approved self-contained breathing apparatus as required for firefighting personnel.

## 6. ACCIDENTAL RELEASE MEASURES

Personal Precautionary Measures:	Use at a minimum safety goggles and/or face shield, gloves and chemical apron.
Environmental Precautionary Measures:	Prevent from entering sewers, waterways, or low areas.
Procedure for Cleaning / Absorption:	Transfer to a container for disposal or recovery. Wash the spillage area with water.

## 7. HANDLING AND STORAGE

Handling Precautions:	Wash hands after use. Avoid contact with eyes, skin, or clothing.
Explosion Hazards:	Not Determined
Storage Information:	Keep away from oxidizing agents. Keep container tightly closed and in a well-ventilated place. Avoid generating dust. Fine dust dispersed in air in sufficient concentrations, and in presence of an ignition source is a potential dust explosion hazard.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls:	Product should be handled in room with general ventilation. Ensure adequate ventilation, especially in confined areas. Use explosion-proof ventilation equipment.
Respiratory Protection:	No personal respiratory protective equipment normally required. An approved dust mask should be worn if exposure to levels above the occupational exposure limit is likely.
Hand Protection:	Gloves (Leather PVC, Neoprene, or Natural Rubber)
Skin Protection:	Wear suitable protective clothing and gloves to ensure skin contact does not occur.
Eye Protection:	Wear safety glasses with side shields or goggles. Face shield required if splash hazard exists.

Other Precautions:	Ensure eyewash stations and safety showers are in the area.
Hygienic Practices:	Wash hands before eating. Wash contaminated areas with soap and water. Flush thoroughly with water.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Granular
Color	White
Odor:	Not applicable
Odor Threshold	Not determined
pH:	5-9 @ 5g/l
Freezing Point, °C / °F	Not applicable
Initial Boiling Point, °C / °F	Not determined
Boiling Point Range, °C / °F	Not determined
Flash Point, °C / °F	Not applicable
Flash Point Method	Not applicable
Evaporation Rate (Butyl Acetate = 1)	Not determined
Flammability: Lower %	Not determined
Flammability: Upper %	Not determined
Vapor Pressure @20 °C (mm Hg)	Not determined
Vapor Density @ 20 °C	Not determined
Density (g/cm <sup>3</sup> )	0.6 - 0.9
Specific Gravity (g/cm <sup>3</sup> )	0.6 - 0.9
Solubility in Water:	Soluble
Partition coefficient: n-octanol/water	-2
Autoignition Temperature, °C / °F	Not determined
Decomposition temperature, °C / °F	> 150C

## 10. STABILITY AND REACTIVITY

Stability Data:	Stable under normal conditions.
Hazardous Polymerization:	Will not occur.
Conditions to Avoid:	Incompatible Materials
Incompatibility (Materials to Avoid):	Incompatible with strong acids and oxidizing agents
Hazardous Decomposition:	Thermal decomposition may produce: NoX Nitrogen Oxides, Carbon Oxides (COx), hydrogen cyanide (hydrocyanic acid)

## 11. TOXICOLOGICAL INFORMATION

Principal Route of Exposure:	
Inhalation:	Not expected to be toxic by inhalation
Skin Contact:	Non-irritant.
Eye Contact:	May cause irritation.
Ingestion:	May cause gastrointestinal symptoms and irritation (diarrhea, nausea and vomiting).
Aggravated Medical Conditions:	Not Determined
Other Information:	None known.
Oral Toxicity:	Rat LD50 > 5000 mg/kg
Dermal Toxicity:	Rat LD50 > 5000 mg/kg
Inhalation Toxicity:	Not Determined
Carcinogenicity:	Not listed by OSHA, IARC or NTP
Reproductive Organ / Developmental Toxicity:	Not toxic for reproduction
Chronic Toxicity Remarks:	Not Determined

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## 12. ECOLOGICAL INFORMATION

Mobility (Water/Soil/Air):	None
Persistence/Degradability:	Not readily biodegradable
Bioaccumulation:	Not bioaccumulating, Partition Co-efficient (Log Pow) -2 Bioconcentration factor (BCF) ~0
Aquatic toxicity:	LC50/Danio rerio/96 hours > 100 mg/l (OECD 203) LC50/Oncorhynchus mykiss/96 hours > 100 mg/l (OECD 203) EC50/Daphnia magna/48 hours > 100 mg/l (OECD 202) IC50/Scenedesmus subspicatus/72 hours > 100/mg/l (OECD 201)
Chemical Fate Information:	Not Determined.
Other Information:	Does not hydrolyse

## 13. DISPOSAL CONSIDERATIONS

Waste Disposal:	Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.
Disposal Method:	Consult local, state, or federal regulatory agencies for acceptable disposal procedures and disposal locations. Disposal in streams or sewers may be prohibited by federal, state, and local regulations.
Storage Information:	Store away from oxidizers. Store in a cool well ventilated area. Keep container closed when not in use.

## 14. TRANSPORT INFORMATION

Land Transportation	
DOT	<b>US DOT(NON-BULK SHIPMENTS)</b> <b>PROPER SHIPPING NAME:</b> Not Regulated <b>TECHNICAL NAME:</b> N/A <b>HAZARD CLASS:</b> N/A <b>UN NUMBER:</b> N/A <b>RESP. GUIDE PAGE:</b> N/A <b>HAZARD SUBCLASS:</b> N/A <b>PACKING GROUP:</b> N/A  <b>US DOT(BULK SHIPMENTS)</b> <b>PROPER SHIPPING NAME:</b> Not Regulated <b>TECHNICAL NAME:</b> N/A <b>HAZARD CLASS:</b> N/A <b>UN NUMBER:</b> N/A <b>RESP. GUIDE PAGE:</b> N/A <b>HAZARD SUBCLASS:</b> N/A <b>PACKING GROUP:</b> N/A



Canadian	<b>PROPER SHIPPING NAME:</b> Not Regulated <b>TECHNICAL NAME:</b> N/A <b>HAZARD CLASS:</b> N/A <b>UN NUMBER:</b> N/A <b>RESP. GUIDE PAGE:</b> N/A	<b>HAZARD SUBCLASS:</b> N/A <b>PACKING GROUP:</b> N/A
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## 15. REGULATORY INFORMATION

US Regulations: Consult Federal, State and local regulations for specific requirements.	<b>Clean Air Act - Hazardous Air Pollutants (HAP):</b> This product contains no Hazardous Air Pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40CFR61). <b>Clean Air Act - Ozone Depleting Substances (ODS)</b> This product neither contains, nor was manufactured with, a Class I or Class II ozone depleting substance (ODS), as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App. A+B) <b>Clean Water Act - Priority Pollutants (PP)</b> This product does not contain any priority pollutants listed under the U.S. Clean Water Act Section 307(2)(1) Priority Pollutant List (40 CFR 401.15).						
US TSCA Inventory	<b>TSCA Section 8(b) Inventory Status:</b> All component(s) comprising this product are either exempt or listed on the TSCA inventory. <b>TSCA Significant New Use Rule (SNUR):</b> This product is not subject to a Significant New Use Rule (SNUR). <b>TSCA Section 5(f):</b> This product is not subject to a Section 5(f)/6(a) rule. <b>TSCA Section 12(b) Export Notification:</b> This product does not contain any component(s) that are subject to Section 12(b) Export Notification						
EPA LIST OF LISTS: Reference EPA document for specific requirements.	<b>CAS#</b>	<b>Section 302 EHS(TPQ)</b>	<b>Section 304 EHS RQ</b>	<b>CERCLA RQ</b>	<b>Section 313</b>	<b>RCRA Code</b>	<b>CAA 112(r) TQ</b>
SARA Title III Section 311/312 (40CFR 370) Hazard Categories:	<b>Immediate (Acute) Hazard:</b> <b>Delayed (Chronic) Hazard:</b> <b>Fire Hazard:</b> <b>Pressure Hazard:</b> <b>Reactivity Hazard:</b>						
California Proposition 65:	WARNING! This product contains a chemical known to the State of California to cause cancer and birth defects of other reproductive harm, Acrylamide. (< 0.1%)						
PA Right-to-Know Law:	None						
Canadian DSL Inventory:	All components either exempt or listed on the DSL.						
WHMIS Hazard Class:	No data available						

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16. OTHER INFORMATION		
NFPA		HMIS
0	HEALTH	0
1	FLAMMABILITY	1
1	REACTIVITY	1
	PERSONAL PROTECTION	B

*The information and recommendations contained herein are, to the best of Downhole Chemical Solutions, L.L.C. knowledge and belief, accurate and reliable as of the last revision date. This document is offered in good faith. The information relates to the specific material designated, and may not be valid for such material used in combination with any other materials, in any process, or if used in a matter other than for which it is intended.*

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Signed: Safety Officer  
Date: Mar 22, 2019  
Revised: Revision 0