

SAFETY DATA SHEET

N-FLOW 325

Revision Date: 28-May-2013

Revision Number: 13

1. Product Identifier & Identity for the Chemical

Statement of Hazardous Nature Hazardous according to the criteria of NOHSC, Non-Dangerous Goods according to the criteria of ADG.

Product Identifier

Product Name N-FLOW 325

Other means of Identification

Synonyms: None
Product Code: HM006340

Recommended use of the chemical and restrictions on use

Recommended Use Breaker
Uses Advised Against No information available

Supplier's name, address and phone number

Manufacturer/Supplier Halliburton Australia Pty. Ltd.
15 Marriott Road
Jandakot
WA 6164
Australia

ACN Number: 009 000 775
Telephone Number: 61 (08) 9455 8300
Fax Number: 61 (08) 9455 5300
E-Mail address: fdunexchem@halliburton.com

Emergency phone number

61 (08) 9455 8300

Australian Poisons Information Centre

24 Hour Service: - 13 11 26
Police or Fire Brigade: - 000 (exchange): - 1100

2. Hazard Identification

Classification of the hazardous chemical

Acute Oral Toxicity	Category 4- H302
Skin Corrosion / irritation	Category 1- H314
Acute Aquatic Toxicity	Acute 3- H402

Label elements, including precautionary statements

Hazard Pictograms

2. Hazard Identification

**Signal Word****Danger****Hazard Statements**

H314 - Causes severe skin burns and eye damage

H302 - Harmful if swallowed

Precautionary Statements**Prevention**

P260 - Do not breathe dust/fume/gas/mist/vapors/spray

P264 - Wash face, hands and any exposed skin thoroughly after handling

P270 - Do not eat, drink or smoke when using this product

P280 - Wear eye protection/face protection

Response

P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting

P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower

P363 - Wash contaminated clothing before reuse

P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

P310 - Immediately call a POISON CENTER or doctor/physician

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

Storage

P405 - Store locked up

Disposal

P501 - Dispose of contents/container to an approved incineration plant

Contains**Substances**

Diethylene Glycol Diformate

CAS Number

120570-77-6

Other hazards which do not result in classification

None known

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

Xn - Harmful.

C - Corrosive.

Risk Phrases

R22 Harmful if swallowed.

R34 Causes burns.

R52 Harmful to aquatic organisms.

Hazard of Hydrolysis Products

R22 Harmful if swallowed.
R35 Causes severe burns.

3. Composition/information on Ingredients

Substances	CAS Number	PERCENT (w/w)
Diethylene Glycol Diformate	120570-77-6	60 - 100%

4. First Aid Measures

Description of necessary first aid measures

Inhalation If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult.

Eyes Immediately flush eyes with large amounts of water for at least 15 minutes. Get immediate medical attention.

Skin Wash with soap and water. Get medical attention if irritation persists.

Ingestion Do not induce vomiting. Slowly dilute with 1-2 glasses of water or milk and seek medical attention. Never give anything by mouth to an unconscious person.

Symptoms caused by exposure

May be harmful if swallowed. May cause eye and skin burns.

Medical Attention and Special Treatment

Notes to Physician Treat symptomatically

5. Fire Fighting Measures

Suitable extinguishing equipment**Suitable Extinguishing Media**

Carbon dioxide, dry chemical, foam.

Extinguishing media which must not be used for safety reasons

None known.

Specific hazards arising from the chemical**Special Exposure Hazards**

Decomposition in fire may produce toxic gases. Avoid spraying water directly into storage containers due to danger of boilover. Use water spray to cool fire exposed surfaces.

Special protective equipment and precautions for fire fighters**Special Protective Equipment for Fire-Fighters**

Full protective clothing and approved self-contained breathing apparatus required for fire fighting personnel.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Use appropriate protective equipment.

Environmental precautions

6. Accidental Release Measures

Prevent contamination of soil. Prevent from entering sewers, waterways, or low areas.

Methods and material for containment and cleaning up

Isolate spill and stop leak where safe. Contain spill with sand or other inert materials. Scoop up and remove.

7. Handling and Storage

Precautions for Safe Handling

Handling Precautions

Avoid contact with eyes, skin, or clothing. Avoid breathing vapors.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice

Conditions for safe storage, including any incompatibilities

Storage Information

Store away from oxidizers. Store in a cool well ventilated area. Keep container closed when not in use. Product has a shelf life of 60 months.

Other Guidelines

No information available

8. Exposure Controls/Personal Protection

Control parameters - exposure standards, biological monitoring

Substances	CAS Number	Australia NOHSC	ACGIH TLV-TWA
Diethylene Glycol Diformate	120570-77-6	Not applicable	Not applicable

Appropriate engineering controls

Engineering Controls

Use in a well ventilated area.

Personal protective equipment (PPE)

Personal Protective Equipment

If engineering controls and work practices cannot prevent excessive exposures, the selection and proper use of personal protective equipment should be determined by an industrial hygienist or other qualified professional based on the specific application of this product.

Respiratory Protection

Not normally necessary.

If engineering controls and work practices cannot keep exposure below occupational exposure limits or if exposure is unknown, wear a NIOSH certified, European Standard EN 149, or equivalent respirator when using this product. Selection of and instruction on using all personal protective equipment, including respirators, should be performed by an Industrial Hygienist or other qualified professional.

Hand Protection

Impervious rubber gloves. Polyvinylchloride gloves.

Skin Protection

Rubber apron. Rubber boots.

Eye Protection

Chemical goggles; also wear a face shield if splashing hazard exists.

Other Precautions

Eyewash fountains and safety showers must be easily accessible.

Environmental Exposure Controls

No information available

9. Physical and Chemical Properties

Information on basic physical and chemical properties

9. Physical and Chemical Properties

Physical State: Liquid **Color:** Clear colorless to pale yellow
Odor: Characteristic **Odor Threshold:** No information available

Property Remarks/ Method	Values
pH:	2.8
Melting Point/Range	<-20°C
Freezing Point/Range (C):	No data available
Boiling Point/Range	238°C
Flash Point	100°C
PMCC	
Evaporation rate	No data available
Vapor Pressure	15 mmHg
Vapor Density	No data available
Specific Gravity	1.19
Water Solubility	Soluble in water
Solubility in other solvents	No data available
Partition coefficient: n-octanol/water	-0.96
Autoignition Temperature	335°C
Decomposition Temperature	No data available
Viscosity	9 mPas
Explosive Properties	No information available
Oxidizing Properties	No information available
Other information	
VOC Content (%)	No data available

10. Stability and Reactivity

Reactivity

Not applicable

Chemical Stability

Stable

Possibility of Hazardous Reactions

Will Not Occur

Conditions to Avoid

None anticipated

Incompatible Materials

Strong oxidizers.

Hazardous Decomposition Products

Carbon monoxide and carbon dioxide.

11. Toxicological Information

Information on routes of exposure**Principle Route of Exposure** Eye or skin contact, inhalation.**Symptoms related to exposure****Most Important Symptoms/Effects**

May be harmful if swallowed. May cause eye and skin burns.

Numerical measures of toxicity

Substances	LD50 Oral	LD50 Dermal	LC50 Inhalation
Diethylene Glycol Diformate	390 mg/kg	No data available	No data available

Immediate, delayed and chronic health effects from exposure

Inhalation	May cause respiratory irritation.
Eye Contact	May cause eye burns.
Skin Contact	May cause skin burns.
Ingestion	May be harmful if swallowed.

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

Exposure Levels

No data available

Interactive effects

None known.

Data limitations

No data available

12. Ecological Information

Ecotoxicity**Product Ecotoxicity Data**

No data available

Substance Ecotoxicity Data

Substances	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Diethylene Glycol Diformate	EC50: 316 mg/l (Skeletonema costatum)	LC50: 421.7 mg/l (Scophthalmus maximus)	No information available	LC50: 55.7 mg/l (Acartia tonsa)

Persistence and degradability

Product is biodegradable

Bioaccumulative potential

Does not bioaccumulate

Substances	Log Pow
Diethylene Glycol Diformate	-0.98

Mobility in soil

No information available

Other adverse effects**Endocrine Disruptor Information**

This product does not contain any known or suspected endocrine disruptors

13. Disposal Considerations

Safe handling and disposal methods

Disposal should be made in accordance with federal, state, and local regulations.

Disposal of any contaminated packaging

13. Disposal Considerations

Follow all applicable national or local regulations.

Environmental regulations

Not applicable

14. Transport Information

Transportation Information

UN Number: UN3265,
UN Proper Shipping Name: Corrosive Liquid, Acidic, Organic, N.O.S.
Transport Hazard Class(es): , 8
Packing Group: , III
Environmental Hazards: Not applicable

Special precautions during transport

None

HazChem Code

None Allocated

15. Regulatory Information

Safety, health and environmental regulations specific for the product

International Inventories

Australian AICS Inventory Product contains one or more components not listed on inventory.
New Zealand Inventory of Chemicals This product does not comply with NZIOC
EINECS Inventory This product, and all its components, complies with EINECS
US TSCA Inventory Product contains one or more components not listed on the inventory.
Canadian DSL Inventory Product contains one or more components not listed on the inventory.

Poisons Schedule number

None Allocated

16. Other Information

Date of preparation or review

Revision Date: 28-May-2013
Revision Note

The following sections have been revised since the last issue of this SDS

Not applicable

Additional Information

For additional information on the use of this product, contact your local Halliburton representative.

For questions about the Safety Data Sheet for this or other Halliburton products, contact Chemical Compliance at 1-580-251-4335.

Key abbreviations or acronyms used

Not applicable

Key literature references and sources for data

www.ChemADVISOR.com/

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End of Safety Data Sheet