HALLIBURTON

SAFETY DATA SHEET

according to Regulation (EC) No. 453/2010

PIPESCRUBTM

Revision Date: 03-Jan-2012 Revision Number: 6

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product Identifier

Product Name PIPESCRUBTM

Relevant identified uses of the substance or mixture and uses advised against

Recommended Use Cleaner

Uses Advised Against No information available

Details of the supplier of the safety data sheet

Halliburton Manufacturing Services, Ltd. Halliburton House, Howemoss Crescent

Kirkhill Industrial Estate

Dyce

Aberdeen, AB21 0GN United Kingdom

Emergency Phone Number: +44 1224 795277 or +1 281 575 5000

www.halliburton.com

For further information, please contact

E-Mail address: fdunexchem@halliburton.com

Emergency telephone number

+44 1224 795277 or +1 281 575 5000

Emergency telephone §45	- (EC)1272/2008		
Europe	112		
Denmark	Poison Control Hotline (DK): +45 82 12 12 12		
France	ORFILA (FR): + 01 45 42 59 59		
Germany	Poison Center Berlin (DE): +49 030 30686 790		
Italy	Poison Center, Milan (IT): +39 02 6610 1029		
Netherlands	National Poisons Information Center (NL): +31 30 274 88 88 (NB: this service is only available to health professionals)		
Norway	Poisons Information (NO):+ 47 22 591300		
Poland	Poison Control and Information Centre, Warsaw (PL): +48 22 619 66 54; +48 22 619 08 97		
Spain	Poison Information Service (ES): +34 91 562 04 20		
United Kingdom	NHS Direct (UK): +44 0845 46 47		

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

REGULATION (EC) No 1272/2008

Skin Corrosion / irritation	Category 2- H315
Skin Sensitization	Category 1- H315
Acute Aquatic Toxicity	Acute 1- H400
Chronic Aquatic Toxicity	Chronic 1- H410

2. HAZARDS IDENTIFICATION

Flammable liquids. Category 3- H226

Classification according to EU Directives 67/548/EEC or 1999/45/EC

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

Classification Xn - Harmful. Xi - Irritant.

N - Dangerous For The Environment.

Risk Phrases R10 Flammable.

R38 Irritating to skin.

R43 May cause sensitization by skin contact. R65 Harmful: may cause lung damage if swallowed.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in

the aquatic environment.

Label Elements

Hazard Pictograms







Signal Word

Warning

Hazard Statements

H315 - Causes skin irritation

H317 - May cause an allergic skin reaction

H400 - Very toxic to aquatic life

H410 - Very toxic to aquatic life with long lasting effects

H226 - Flammable liquid and vapor

Contains

Substances Citrus, extract **CAS Number** 94266-47-4

Precautionary Statements - EU (§28, 1272/2008)

P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking

P273 - Avoid release to the environment

P280 - Wear protective gloves/protective clothing/eye protection/face protection

Other Hazards

None known

3. COMPOSITION/INFORMATION ON INGREDIENTS						
Substances	EINECS	CAS Number	PERCENT	EEC Classification	EU - CLP Substance Classification	REACH No.
Citrus, extract	304-454-3	94266-47-4	60 - 100%	R10 Xi; R38-43 Xn; R65 N; R50/53	Asp. Tox. 1 (H304) Skin Irrit. 2 (H315) Skin Sens. 1 (H317) Aquatic Acute 3 (H402) Aquatic Chronic 3 (H412) Elam Lig. 3 (H226)	No data available

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

4. FIRST AID MEASURES

Description of 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.

Eyes In case of contact, or suspected contact, immediately flush eyes with plenty of

water for at least 15 minutes and get medical attention immediately after flushing.

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

Ingestion Get medical attention! If vomiting occurs, keep head lower than hips to prevent

aspiration.

Most Important symptoms and effects, both acute and delayed

May cause eye, skin, and respiratory irritation. May cause headache, dizziness, and other central nervous system effects. May cause allergic skin reaction.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically

5. FIREFIGHTING MEASURES

Extinguishing mediaó

Suitable Extinguishing Media

Water fog, carbon dioxide, foam, dry chemical.

Extinguishing media which must not be used for safety reasons

None known.

Special hazards arising from the substance of mixture

Special Exposure Hazards

Use water spray to cool fire exposed surfaces. Closed containers may explode in fire. Decomposition in fire may produce toxic gases. Vapors are heavier than air and may accumulate in low areas. Vapors may travel along the ground to be ignited at distant locations.

Advice for firefighters

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. Wear self-contained breathing apparatus in enclosed areas.

See Section 12 for additional information

Environmental precautions

Prevent from entering sewers, waterways, or low areas.

Methods and material for containment and cleaning up

Isolate spill and stop leak where safe. Remove ignition sources and work with non-sparking tools. Contain spill with sand or other inert materials. Scoop up and remove.

Reference to other sections

See Section 12 for additional information.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Avoid contact with eyes, skin, or clothing. Avoid breathing vapors. Wash hands after use. Launder contaminated clothing before reuse.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice

Conditions for safe storage, including any incompatibilities

Store away from oxidizers. Store in a cool well ventilated area. Keep from heat, sparks, and open flames. Product has a shelf life of 12 months.

Specific End Use(s)

Exposure Scenario No information available Other Guidelines No information available

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Substances	EU	UK OEL	Netherlands	France OEL	Germany MAK/TRK
Citrus, extract	Not applicable				

Substances	Italy	Poland	Hungary	Czech Republic	Denmark
Citrus, extract	Not applicable				

Derived No Effect Level (DNEL)
Predicted No Effect Concentration

(PNEC)

No information available. No information available.

Exposure controls

Engineering ControlsUse in a well ventilated area. Local exhaust ventilation should be used in areas without good

cross ventilation.

Personal protective equipment

Respiratory Protection Not normally needed. But if significant exposures are possible then the following respirator

is recommended:

Organic vapor respirator.

Hand Protection Impervious rubber gloves.

Skin Protection Rubber apron.

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

Physical State:LiquidColor:Clear colorless to pale yellowOdor:CitrusOdor Threshold:No information available

<u>Property</u> <u>Values</u>

Remarks/ Method

pH:No data availableMelting Point/RangeNo data available

Freezing Point/Range (C): -92.1°C Boiling Point/Range 154°C Flash Point 46°C

PMCC

upper flammability limit 6.1% lower flammability limit 0.7% Evaporation rate < 1
Vapor Pressure 2 mmHg

9. PHYSICAL AND CHEMICAL PROPERTIES

Vapor Density 4.73 Specific Gravity 0.84

Water Solubility Insoluble in water Solubility in other solvents No data available

Partition coefficient: n-octanol/water 4.23

Autoignition TemperatureNo data availableDecomposition TemperatureNo data availableViscosityNo data availableExplosive PropertiesNo information availableOxidizing PropertiesNo 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

Keep away from heat, sparks and flame. Avoid contact with acids. Avoid contact with aluminum chloride.

Incompatible Materials

Strong oxidizers. Strong acids. Pentafluoroethylene.

Hazardous Decomposition Products

Oxides of nitrogen. Acrid fumes. Carbon monoxide and carbon dioxide.

11. TOXICOLOGICAL INFORMATION

Information on Toxicological Effects

Acute Toxicity

Inhalation May cause respiratory irritation. May cause central nervous system depression including

headache, dizziness, drowsiness, incoordination, slowed reaction time, slurred speech,

giddiness and unconsciousness.

Eye Contact May cause eye irritation.

Skin Contact May cause skin irritation. May cause an allergic skin reaction. May be absorbed through the

skin and produce effects similar to those caused by inhalation and/or ingestion.

Ingestion May be fatal if swallowed. May cause central nervous system depression including

headache, dizziness, drowsiness, muscular weakness, incoordination, slowed reaction time,

fatigue blurred vision, slurred speech, giddiness, tremors and convulsions.

Chronic Effects/Carcinogenicity Prolonged or repeated exposure may cause central nervous system and brain

effects. FDA and WHMIS list D-limonene as Generally Recognized As Safe

(GRAS).

Substances	LD50 Oral	LD50 Dermal	LC50 Inhalation
Citrus, extract	> 5000 mg/kg	No data available	No data available

12. ECOLOGICAL INFORMATION

Toxicity

12. ECOLOGICAL INFORMATION

Ecotoxicity Effects

Substances	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water
				Flea)
Citrus, extract	EC50: 20.41 mg/l	LC50: >1000 mg/l	No information available	LC50: 34.73 mg/l (Acartia
·	(Skeletonema costatum)	(Scophthalmus maximus)		tonsa)

Persistence and degradability

Readily biodegradable

Bioaccumulative potential

No information available

Substances	Log Pow
Citrus, extract	4.23

Mobility in soil

No information available

Results of PBT and vPvB assessment

No information available.

Other adverse effects

Endocrine Disruptor Information

This product does not contain any known or suspected endocrine disruptors

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

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

Contaminated Packaging Follow all applicable national or local regulations.

14. TRANSPORT INFORMATION

IMDG/IMO

UN Number: UN2319,

UN Proper Shipping Name: Terpene Hydrocarbons, N.O.S.

Transport Hazard Class(es): , 3 Packing Group: , III

EMS: EmS F-E, S-D

RID

UN Number: UN2319,

UN Proper Shipping Name: Terpene Hydrocarbons, N.O.S.

Transport Hazard Class(es): , 3
Packing Group: , III

ADR

UN Number: UN2319,

UN Proper Shipping Name: Terpene Hydrocarbons, N.O.S.

Transport Hazard Class(es): , 3 Packing Group: , III

IATA/ICAO

UN Number: UN2319,

UN Proper Shipping Name: Terpene Hydrocarbons, N.O.S.

14. TRANSPORT INFORMATION

Transport Hazard Class(es): , 3
Packing Group: , III

Special Precautions for User None

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

International Inventories

EINECS Inventory This product, and all its components, complies with EINECS

US TSCA Inventory
Canadian DSL Inventory
All components listed on inventory or are exempt.
All components listed on inventory or are exempt.

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

Germany, Water Endangering

Classes (WGK)

WGK 1: Low hazard to waters.

Chemical Safety Assessment

No information available

16. OTHER INFORMATION

Full text of R-phrases referred to under Sections 2 and 3

R10 Flammable.

R38 Irritating to skin.

R43 May cause sensitization by skin contact.

R65 Harmful: may cause lung damage if swallowed.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Key literature references and sources for data

www.ChemADVISOR.com/

Revision Date: 03-Jan-2012 Revision Note Not applicable

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Disclaimer Statement

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End of Safety Data Sheet