

SAFETY DATA SHEET

according to Regulation (EC) No. 453/2010

PERM C CONFORMANCE ADDITIVE

Revision Date: 03-Jan-2012

Revision Number: 11

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

Product Identifier**Product Name**

PERM C CONFORMANCE ADDITIVE

Relevant identified uses of the substance or mixture and uses advised against**Recommended Use**

Additive

Uses Advised Against

No information available

Details of the supplier of the safety data sheet

Halliburton Energy Services
Halliburton House, Howemoss Place
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**

Acute Oral Toxicity	Category 4 - (H302)
Skin Sensitization	Category 1 - (H317)
Flammable solids.	Category 2 - (H228)

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

2. HAZARDS IDENTIFICATION

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

Classification Xn - Harmful.

Risk Phrases R22 Harmful if swallowed.
R43 May cause sensitization by skin contact.

Label Elements

Hazard Pictograms



Signal Word

Warning

Hazard Statements

H302 - Harmful if swallowed
H317 - May cause an allergic skin reaction
H228 - Flammable solid

Contains

Substances

2,2'-Azobis(2-amidopropane) dihydrochloride

CAS Number

2997-92-4

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

P280 - Wear protective gloves/protective clothing

Other Hazards

Dust can form an explosive mixture in air

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances	EINECS	CAS Number	PERCENT	EEC Classification	EU - CLP Substance Classification	REACH No.
2,2'-Azobis(2-amidopropane) dihydrochloride	221-070-0	2997-92-4	60 - 100%	Xn; R22 R43	Acute Tox. 4 (H302) Skin Sens. 1 (H317)	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

4. 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	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.
Skin	Wash with soap and water. Remove contaminated clothing and launder before reuse. Get medical attention if irritation persists.
Ingestion	If swallowed, induce vomiting immediately by giving two glasses of water and sticking fingers down throat; never give anything to an unconscious person. Get medical attention.

Most Important symptoms and effects, both acute and delayed

May cause eye, skin, and respiratory irritation. May cause headache and nausea. May cause allergic skin reaction.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically

5. FIREFIGHTING MEASURES

Extinguishing media

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

Organic dust in the presence of an ignition source can be explosive in high concentrations. Good housekeeping practices are required to minimize this potential.

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. Avoid creating and breathing dust.

See Section 12 for additional information

Environmental precautions

None known.

Methods and material for containment and cleaning up

Scoop up and remove. Flush area with water.

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. Wash hands after use. Avoid contact with persulfate which can lead to the formation of shock and friction sensitive mixtures.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice

Conditions for safe storage, including any incompatibilities

Store away from direct sunlight. Store in a cool well ventilated area. Keep from heat, sparks, and open flames. Keep away from friction, impact, and heat. Container should NOT be closed tightly. 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
2,2'-Azobis(2-amidopropane) dihydrochloride	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

Substances	Italy	Poland	Hungary	Czech Republic	Denmark
2,2'-Azobis(2-amidopropane) dihydrochloride	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

Derived No Effect Level (DNEL) No information available.

Predicted No Effect Concentration (PNEC) No information available.

Exposure controls

Engineering Controls

Use in a well ventilated area. Localized ventilation should be used to control dust levels.

Personal protective equipment

Respiratory Protection

Organic vapor respirator with a dust/mist filter.

Hand Protection

Impervious rubber gloves.

Skin Protection

Normal work coveralls.

Eye Protection

Dust proof goggles.

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

Physical State: Solid

Color: Off white

Odor: Odorless

Odor Threshold: No information available

Property

Values

Remarks/ Method

pH:

No data available

Melting Point/Range

No data available

Freezing Point/Range (C):

No data available

Boiling Point/Range

No data available

Flash Point

No data available

Evaporation rate

No data available

Vapor Pressure

No data available

Vapor Density

No data available

Specific Gravity

1.2

Water Solubility

Soluble in water

Solubility in other solvents

No data available

Partition coefficient: n-octanol/water

No data available

Autoignition Temperature

No data available

Decomposition Temperature

No data available

Viscosity

No data available

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

10. STABILITY AND REACTIVITY**Possibility of Hazardous Reactions**

Will Not Occur

Conditions to Avoid

Keep away from heat, sparks and flame. Avoid contact with sunlight.

Incompatible Materials

Strong oxidizers. Strong alkalis.

Hazardous Decomposition Products

Hydrogen chloride. Oxides of nitrogen. 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 be absorbed through the skin and contribute to the symptoms listed under ingestion. May cause an allergic skin reaction.

Ingestion

Irritation of the mouth, throat, and stomach. May cause headache, dizziness, nausea, vomiting, gastrointestinal irritation and central nervous system depression.

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

Substances	LD50 Oral	LD50 Dermal	LC50 Inhalation
2,2'-Azobis(2-amidopropane) dihydrochloride	No data available	No data available	No data available

12. ECOLOGICAL INFORMATION**Toxicity****Ecotoxicity Effects**

Substances	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
2,2'-Azobis(2-amidopropane) dihydrochloride	No information available	No information available	No information available	No information available

Persistence and degradability

No information available

Bioaccumulative potential

No information available

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 Method

Disposal 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: UN3088,
UN Proper Shipping Name: Self-heating, Solid, Organic, N.O.S.
Transport Hazard Class(es): , 4.2
Packing Group: , II
EMS: EmS F-A, S-J

RID

UN Number: UN3088,
UN Proper Shipping Name: Self-heating, Solid, Organic, N.O.S.
Transport Hazard Class(es): , 4.2
Packing Group: , II

ADR

UN Number: UN3088,
UN Proper Shipping Name: Self-heating, Solid, Organic, N.O.S.
Transport Hazard Class(es): , 4.2
Packing Group: , II

IATA/ICAO

UN Number: UN3088,
UN Proper Shipping Name: Self-heating, Solid, Organic, N.O.S.
Transport Hazard Class(es): , 4.2
Packing Group: , II

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

All components listed on inventory or are exempt.

Canadian DSL Inventory

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/NDL - Canadian Domestic Substances List/Non-Domestic Substances List

Germany, Water Endangering Classes (WGK)

WGK 2: Hazard to waters.

Chemical Safety Assessment

No information available

16. OTHER INFORMATION

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

R22 Harmful if swallowed.

R43 May cause sensitization by skin contact.

Key literature references and sources for datawww.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**

This information is furnished without warranty, expressed or implied, as to accuracy or completeness. The information is obtained from various sources including the manufacturer and other third party sources. The information may not be valid under all conditions nor if this material is used in combination with other materials or in any process. Final determination of suitability of any material is the sole responsibility of the user.

End of Safety Data Sheet