

SAFETY DATA SHEET

according to Regulation (EC) No. 453/2010

PARAGON

Revision Date: 20-Dec-2012

Revision Number: 9

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

Product Identifier

Product Name PARAGON

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

Recommended Use Solvent
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 Toxicity - Dermal	Category 4- H312
Acute Inhalation Toxicity - Vapors	Category 4- H332
Skin Corrosion / irritation	Category 2- H315

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.**Risk Phrases**

R10 Flammable.

R38 Irritating to skin.

R20/21 Harmful by inhalation and by contact with skin.

Label Elements**Hazard Pictograms****Signal Word****Warning****Hazard Statements**

H312 - Harmful in contact with skin

H332 - Harmful if inhaled

H315 - Causes skin irritation

H226 - Flammable liquid and vapor

Contains**Substances**

Xylene

Ethyl benzene

CAS Number

1330-20-7

100-41-4

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

P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking
 P233 - Keep container tightly closed
 P240 - Ground/Bond container and receiving equipment
 P241 - Use explosion-proof electrical/ventilating/lighting/equipment
 P242 - Use only non-sparking tools
 P243 - Take precautionary measures against static discharge
 P261 - Avoid breathing dust/fume/gas/mist/vapors/spray
 P264 - Wash face, hands and any exposed skin thoroughly after handling
 P280 - Wear protective gloves/protective clothing/eye protection/face protection
 P302 + P352 - IF ON SKIN: Wash with plenty of soap and water
 P312 - Call a POISON CENTER or doctor/physician if you feel unwell
 P363 - Wash contaminated clothing before reuse
 P304 + P340 - IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing
 P312 - Call a POISON CENTER/doctor/physician if you feel unwell
 P332 + P313 - If skin irritation occurs: Get medical advice/attention
 P370 + P 378 - In case of fire: Use CO2, dry chemical, or foam

Other Hazards

None known

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances	EINECS	CAS Number	PERCENT	EEC Classification	EU - CLP Substance Classification	REACH No.
Xylene	215-535-7	1330-20-7	60 - 100%	R10 Xn; R20/21 Xi; R38	Acute Tox. 4 (H312) Acute Tox. 4 (H332) Skin Irrit. 2 (H315) Flam. Liq. 3 (H226)	No data available
Ethyl benzene	202-849-4	100-41-4	10 - 30%	F; R11 Xn; R20	Acute Tox. 4 (H332) Flam. Liq. 2 (H225)	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

In case of contact, immediately flush skin with plenty of soap and water for at least 15 minutes. Get medical attention. Remove contaminated clothing and launder before reuse.

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 and skin irritation. May cause headache, dizziness, and other central nervous system effects.

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

May be ignited by heat, sparks or flames. Use water spray to cool fire exposed surfaces. Closed containers may explode in fire. Decomposition in fire may produce toxic gases.

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. Keep from heat, sparks, and open flames. Keep container closed when not in use. Product has a shelf life of 60 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
Xylene	Not applicable	50 ppm	210 mg/m ³	50 ppm	100 ppm
Ethyl benzene	Not applicable	100 ppm	215 mg/m ³	20 ppm	100 ppm

Substances	Italy	Poland	Hungary	Czech Republic	Denmark
Xylene	50 ppm	100 mg/m ³	221 mg/m ³	200 mg/m ³	Not applicable
Ethyl benzene	100 ppm	200 mg/m ³	442 mg/m ³	200 mg/m ³	50 ppm

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. Local exhaust ventilation should be used in areas without good cross ventilation.

Personal protective equipment**Respiratory Protection**

Organic vapor respirator.
In high concentrations, supplied air respirator or a self-contained breathing apparatus.

Hand Protection

Impervious rubber gloves.

Skin Protection	Rubber apron.
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

Physical State: Liquid	Color: Clear to water white
Odor: Aromatic hydrocarbon	Odor Threshold: No information available

<u>Property</u>	<u>Values</u>
<u>Remarks/ Method</u>	
pH:	7
Melting Point/Range	No data available
Freezing Point/Range (C):	No data available
Boiling Point/Range	138°C
Flash Point	26°C
PMCC	
upper flammability limit	7%
lower flammability limit	1%
Evaporation rate	No data available
Vapor Pressure	21 mmHg
Vapor Density	No data available
Specific Gravity	0.86
Water Solubility	Insoluble in water
Solubility in other solvents	No data available
Partition coefficient: n-octanol/water	No data available
Autoignition Temperature	498°C
Decomposition Temperature	No data available
Viscosity	No data available
Explosive Properties	No information available
Oxidizing Properties	No information available

Other information

Molecular Weight	106
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.

Incompatible Materials

Strong oxidizers.

Hazardous Decomposition Products

Carbon monoxide and carbon dioxide.

11. TOXICOLOGICAL INFORMATION

Information on Toxicological Effects

Acute Toxicity

Inhalation

May cause respiratory irritation. This material is an anesthetic. May cause central nervous system depression including headache, dizziness, drowsiness, incoordination, slowed reaction time, slurred speech, giddiness and unconsciousness.

Eye Contact Skin Contact

May cause eye irritation.

May be absorbed through the skin and contribute to the symptoms listed under ingestion. May cause skin irritation.

11. TOXICOLOGICAL INFORMATION

Ingestion

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

Chronic Effects/Carcinogenicity Prolonged or repeated exposure may cause liver, kidney and blood effects. Prolonged or repeated exposure may cause central nervous system and brain effects. Prolonged or repeated exposure may cause embryo and fetus toxicity.

Substances	LD50 Oral	LD50 Dermal	LC50 Inhalation
Xylene	4300 mg/kg	>1700 mg/kg	5000 ppm 4h
Ethyl benzene	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)
Xylene	No information available	LC50: 13.4 mg/L (Pimephales promelas)	No information available	EC50: 3.82 mg/L (Daphnia magna)
Ethyl benzene	No information available	No information available	No information available	No information available

Persistence and degradability

Not readily biodegradable

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: UN1307,
UN Proper Shipping Name: Xylenes
Transport Hazard Class(es): , 3
Packing Group: , III
EMS: EmS F-E, S-D

14. TRANSPORT INFORMATION**RID**

UN Number: UN1307,
UN Proper Shipping Name: Xylenes
Transport Hazard Class(es): , 3
Packing Group: , III

ADR

UN Number: UN1307,
UN Proper Shipping Name: Xylenes
Transport Hazard Class(es): , 3
Packing Group: , III

IATA/ICAO

UN Number: UN1307,
UN Proper Shipping Name: Xylenes
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 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**

R10 Flammable.

R38 Irritating to skin.

R20/21 Harmful by inhalation and by contact with skin.

Key literature references and sources for data

www.ChemADVISOR.com/

Revision Date: 20-Dec-2012

Revision Note Not applicable

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

16. OTHER INFORMATION

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