

SAFETY DATA SHEET
according to Regulation (EC) No. 453/2010**ACETIC ACID GLACIAL (99.5%)**

Revision Date: 13-Jun-2011

Revision Number: 7

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**Product Identifier****Product Name** ACETIC ACID GLACIAL (99.5%)**Relevant identified uses of the substance or mixture and uses advised against**

Recommended Use	Acid
Sector of use	SU2a - Mining, (without offshore industries) SU2b - Offshore industries
Product category	PC20 - Products such as pH-regulators, flocculants, precipitants, neutralization agents, other unspecified
Process categories	PROC1 - Use in closed process, no likelihood of exposure
Uses Advised Against	No information available

Details of the supplier of the safety data sheet

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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

2. HAZARDS IDENTIFICATION

Skin Corrosion / irritation	Category 1 A- H314
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 C - Corrosive.

Risk Phrases R10 Flammable.
 R35 Causes severe burns.

Label Elements

Hazard Pictograms



Signal Word Danger

Hazard Statements

H314 - Causes severe skin burns and eye damage

H226 - Flammable liquid and vapor

Contains

Substances

Acetic acid

CAS Number

64-19-7

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

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

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

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

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

P370 + P380 + P375 - In case of fire, use water/water spray/water jet/carbon dioxide/sand/foam/alcohol resistant foam/chemical powder for extinction

Other Hazards

None known

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances	EINECS	CAS Number	PERCENT	EEC Classification	EU - CLP Substance Classification	REACH No.
Acetic acid	200-580-7	64-19-7	60 - 100%	R10 C; R35	Skin Corr. 1A (H314) Flam. Liq. 3 (H226)	01-2119475328-30

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 from area to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult.

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 laundry before reuse.

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.

Most Important symptoms and effects, both acute and delayed

May cause eye, skin, and respiratory burns.

Indication of any immediate medical attention and special treatment needed

Notes to Physician

Treat symptomatically

5. FIREFIGHTING MEASURES

Extinguishing media

Suitable Extinguishing Media

Water spray, dry chemical, or foam.

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. Decomposition in fire may produce toxic gases. Do not allow runoff to enter waterways.

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.

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. Neutralize with lime slurry, limestone, or soda ash. 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 alkalis. Store away from oxidizers. Store in a cool well ventilated area. Keep container closed when not in use.

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
Acetic acid	10 ppm	Not applicable	Not applicable	10 ppm	10 ppm

Substances	Italy	Poland	Hungary	Czech Republic	Denmark
Acetic acid	10 ppm	15 mg/m ³	25 mg/m ³	25 mg/m ³	10 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/acid gas respirator.
Hand Protection Impervious rubber gloves.
Skin Protection Full protective chemical resistant clothing.
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

Odor: Acrid

Odor Threshold: No information available

Property

Values

Remarks/ Method

pH:	2.9
Melting Point/Range	No data available
Freezing Point/Range (C):	16°C
Boiling Point/Range	62°C
Flash Point	42°C
PMCC	
upper flammability limit	16%
lower flammability limit	5.4%
Evaporation rate	No data available
Vapor Pressure	11.7 mmHg
Vapor Density	No data available
Specific Gravity	1.05
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

Molecular Weight 60.6
VOC Content (%) No data available

10. STABILITY AND REACTIVITY

Reactivity

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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 alkalis.

Hazardous Decomposition Products

Toxic fumes. Carbon monoxide and carbon dioxide.

11. TOXICOLOGICAL INFORMATION

Information on Toxicological Effects**Acute Toxicity****Inhalation**

Causes severe respiratory irritation.

Eye Contact

May cause eye burns.

Skin Contact

Causes severe burns.

Ingestion

Causes burns of the mouth, throat and stomach.

Chronic Effects/Carcinogenicity Prolonged, excessive exposure may cause erosion of the teeth.

Substances	LD50 Oral	LD50 Dermal	LC50 Inhalation
Acetic acid	3310 mg/kg	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)
Acetic acid	No information available	LC50: 79 mg/l (Pimephales promelas)	No information available	EC50: 47 mg/l (Daphnia magna)

Persistence and degradability

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: UN2789,
UN Proper Shipping Name: Acetic Acid, Glacial
Transport Hazard Class(es): , 8, (3)
Packing Group: , II
EMS: EmS F-E, S-C

RID

UN Number: UN2789,
UN Proper Shipping Name: Acetic Acid, Glacial
Transport Hazard Class(es): , 8, (3)
Packing Group: , II

ADR

UN Number: UN2789,
UN Proper Shipping Name: Acetic Acid, Glacial
Transport Hazard Class(es): , 8, (3)
Packing Group: , II

IATA/ICAO

UN Number: UN2789,
UN Proper Shipping Name: Acetic Acid, Glacial
Transport Hazard Class(es): , 8, (3)
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/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.

R35 Causes severe burns.

Key literature references and sources for datawww.ChemADVISOR.com/

Revision Date: 13-Jun-2011
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