

SAFETY DATA SHEET according to Regulation (EC) No. 1907/2006

PICKLE HF ACID/NITRIC ACID

Version 1.0

Print Date 2013/11/22

Revision date / valid from 2013/11/22

MSDS code: **MAAF522**

Section 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name : PICKLE HF ACID/NITRIC ACID

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

Use of the Substance/Mixture : At this time we do not yet have information on identified uses. They will be included in this safety data sheet when available.

Uses advised against : At this moment we have not identified any uses advised against

1.3. Details of the supplier of the safety data sheet

Company : Brenntag UK & Ireland
Albion House, Rawdon Park
GB LS19 7XX Leeds Yeadon

Telephone : +44 (0) 113 3879 200
Telefax : +44 (0) 113 3879 280
E-mail address : msds@brenntag.co.uk

1.4. Emergency telephone number

Emergency telephone number : Emergency only telephone number (open 24 hours):
+44 (0) 1865 407333 (N.C.E.C. Culham)

Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

REGULATION (EC) No 1272/2008			
Hazard class	Hazard category	Target Organs	Hazard statements
Acute toxicity (Oral)	Category 3	---	H301
Acute toxicity (Inhalation)	Category 3	---	H331
Acute toxicity (Dermal)	Category 3	---	H311
Skin corrosion	Category 1A	---	H314

For the full text of the H-Statements mentioned in this Section, see Section 16.

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

Directive 67/548/EEC or 1999/45/EC	
Hazard symbol / Category of danger	Risk phrases
Toxic (T)Toxic (T)	R23/24/25
Corrosive (C)Corrosive (C)	R35


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

Most important adverse effects

- Human Health : See section 11 for toxicological information.
- Physical and chemical hazards : See section 9 for physicochemical information.
- Potential environmental effects : See section 12 for environmental information.

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008

- Hazard symbols : 
- Signal word : Danger
- Hazard statements : H314 Causes severe skin burns and eye damage.
H301 + H311 + H331 Toxic if swallowed, in contact with skin or if inhaled
- Precautionary statements
- Prevention : P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
- Response : P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.
P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER or doctor/ physician.
P361 Remove/ Take off immediately all

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Storage : P370 + P378 contaminated clothing.
In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

Storage : P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

Hazardous components which must be listed on the label:

- nitric acid
- hydrofluoric acid

2.3. Other hazards

For Results of PBT and vPvB assessment see section 12.5.

Section 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components	Amount [%]	Classification (REGULATION (EC) No 1272/2008)		Classification (67/548/EEC)
		Hazard class / Hazard category	Hazard statements	
nitric acid				
Index-No. : 007-004-00-1	>= 50 - < 65	Ox. Liq.3 Skin Corr.1A	H272 H314	Oxidising; O; R 8 Corrosive; C; R35
CAS-No. : 7697-37-2				
EC-No. : 231-714-2				
hydrofluoric acid				
Index-No. : 009-003-00-1	>= 1 - <= 6.9	Acute Tox.2 Acute Tox.1 Acute Tox.2 Skin Corr.1A	H330 H310 H300 H314	Very toxic; T+; R26/27/28 Corrosive; C; R35
CAS-No. : 7664-39-3				
EC-No. : 231-634-8				
Registration : 01-2119458860-33-xxxx				

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

For the full text of the H-Statements mentioned in this Section, see Section 16.

Section 4: First aid measures

4.1. Description of first aid measures

General advice : First aider needs to protect himself. Remove from exposure, lie down. Take off all contaminated clothing immediately.

If inhaled : Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. Oxygen, if needed. No artificial respiration, mouth-to-mouth or mouth to nose. Use suitable

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	instruments/apparatus. Call a physician immediately.
In case of skin contact	: Wash off immediately with soap and plenty of water. Call a physician immediately.
In case of eye contact	: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Consult an eye specialist immediately. Go to an ophthalmic hospital if possible.
If swallowed	: Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Keep patient warm and at rest. Do NOT induce vomiting. Call a physician immediately. If a person vomits when lying on his back, place him in the recovery position.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms	: See Section 11 for more detailed information on health effects and symptoms.
Effects	: See Section 11 for more detailed information on health effects and symptoms.

4.3. Indication of any immediate medical attention and special treatment needed

Treatment	: Treat symptomatically.
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Section 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Alcohol-resistant foam, Carbon dioxide (CO ₂)
Unsuitable extinguishing media	: High volume water jet

5.2. Special hazards arising from the substance or mixture

Specific hazards during firefighting	: Toxic gases, Under fire conditions: Carbon monoxide, Carbon dioxide (CO ₂), The formation of caustic fumes is possible.
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5.3. Advice for firefighters

Special protective equipment for firefighters	: In the event of fire, wear self-contained breathing apparatus. Wear appropriate body protection (full protective suit)
Further information	: Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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Personal precautions : Use personal protective equipment. Keep people away from and upwind of spill/leak. Avoid contact with the skin and the eyes. Do not breathe vapours or spray mist. Wear respiratory protection.

6.2. Environmental precautions

Environmental precautions : Should not be released into the environment. If material reaches soil inform authorities responsible for such cases. If the product contaminates rivers and lakes or drains inform respective authorities.

6.3. Methods and materials for containment and cleaning up

Methods and materials for containment and cleaning up : Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders). Keep in suitable, closed containers for disposal.
: Use mechanical handling equipment. Keep in suitable, closed containers for disposal.

Further information : Treat recovered material as described in the section "Disposal considerations".

6.4. Reference to other sections

See Section 1 for emergency contact information.
See Section 8 for information on personal protective equipment.
See Section 13 for waste treatment information.

Section 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling : Keep container tightly closed. Use personal protective equipment. Use product only in closed system. Avoid contact with the skin and the eyes. Do not breathe vapours or spray mist. Use respirator with appropriate filter if vapours or aerosol are released. Emergency eye wash fountains and emergency showers should be available in the immediate vicinity.

Hygiene measures : Keep away from food, drink and animal feedingstuffs. Smoking, eating and drinking should be prohibited in the application area. Wash hands before breaks and at the end of workday. Take off all contaminated clothing immediately. Keep working clothes separately.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Store in a place accessible by authorized persons only. Keep only in the original container.

Advice on protection against fire and explosion : Normal measures for preventive fire protection.

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Further information on storage conditions : Keep tightly closed in a dry and cool place. Keep away from heat. Keep in a well-ventilated place.

Advice on common storage : Keep away from food, drink and animal feedingstuffs.

7.3. Specific end use(s)

Specific use(s) : No information available.

Section 8: Exposure controls/personal protection

8.1. Control parameters

Component:	nitric acid	CAS-No. 7697-37-2
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Other Occupational Exposure Limit Values

EU ELV, Short Term Exposure Limit (STEL):
1 ppm, 2.6 mg/m³
Indicative

EH40 WEL, Short Term Exposure Limit (STEL):
1 ppm, 2.6 mg/m³

ELV (IE), Short Term Exposure Limit (STEL):
1 ppm, 2.6 mg/m³
Indicative OELV

Component:	hydrofluoric acid	CAS-No. 7664-39-3
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Other Occupational Exposure Limit Values

EU ELV, Time Weighted Average (TWA):
1.8 ppm, 1.5 mg/m³
Indicative

EU ELV, Short Term Exposure Limit (STEL):
3 ppm, 2.5 mg/m³
Indicative

EH40 WEL, Time Weighted Average (TWA):, as F
1.8 ppm, 1.5 mg/m³

EH40 WEL, Short Term Exposure Limit (STEL):, as F
3 ppm, 2.5 mg/m³

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ELV (IE), Short Term Exposure Limit (STEL):as F
3 ppm, 2.5 mg/m³
Indicative OELV

ELV (IE), Skin designation:as F
Can be absorbed through the skin.

ELV (IE), Time Weighted Average (TWA):, as F
1.8 ppm, 1.5 mg/m³
Indicative OELV

8.2. Exposure controls

Appropriate engineering controls

Refer to protective measures listed in sections 7 and 8.

Personal protective equipment

Respiratory protection

Advice : In case of brief exposure or low pollution use breathing filter apparatus.
Recommended Filter type:A
In case of intensive or longer exposure use self-contained breathing apparatus.

Hand protection

Advice : Wear suitable gloves.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.
Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).
Protective gloves should be replaced at first signs of wear.
The following materials are suitable:

Material : PVC

Eye protection

Advice : Tightly fitting safety goggles

Skin and body protection

Advice : impervious clothing
Chemical resistant apron

Environmental exposure controls

General advice : Should not be released into the environment.
If material reaches soil inform authorities responsible for such cases.
If the product contaminates rivers and lakes or drains inform

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respective authorities.

Section 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Form	:	Liquid
Colour	:	clear straw
Odour	:	no data available
Odour Threshold	:	no data available
pH	:	< 1
Freezing point	:	no data available
Boiling point	:	no data available
Flash point	:	no data available
Evaporation rate	:	no data available
Flammability (solid, gas)	:	no data available
Upper explosion limit	:	no data available
Lower explosion limit	:	no data available
Vapour pressure	:	no data available
Relative vapour density	:	no data available
Relative density	:	1.1 - 1.12
Water solubility	:	soluble
Partition coefficient: n-octanol/water	:	no data available
Auto-ignition temperature	:	no data available
Thermal decomposition	:	no data available
Viscosity, dynamic	:	no data available
Explosivity	:	no data available
Oxidizing properties	:	no data available

9.2. Other information

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No further information available.

Section 10: Stability and reactivity

10.1. Reactivity

Advice : Stable under recommended storage conditions.

10.2. Chemical stability

Advice : No decomposition if stored and applied as directed.

10.3. Possibility of hazardous reactions

Hazardous reactions : No information available.

10.4. Conditions to avoid

Conditions to avoid : No information available.

10.5. Incompatible materials

Materials to avoid : Strong bases, Metals

10.6. Hazardous decomposition products

Hazardous decomposition products : No information available.

Section 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Oral

Acute toxicity estimate : 72.47 mg/kg) (Calculation method)

Inhalation

Acute toxicity estimate : 1449 ppm (gas) (Calculation method)

Dermal

Acute toxicity estimate : 72.46 mg/kg) (Calculation method)

Irritation

Skin

Result : Causes severe burns.

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Eyes

Result : Causes serious eye damage.

Sensitisation

no data available

CMR effects

CMR Properties

Carcinogenicity : No evidence of carcinogenic effects.

Mutagenicity : No evidence of mutagenic effects.

Teratogenicity : It is not considered teratogenic.

Reproductive toxicity : no data available

Specific Target Organ Toxicity

Single exposure

no data available

Repeated exposure

no data available

Other toxic properties

Repeated dose toxicity

no data available

Aspiration hazard

no data available

Further information

Other relevant toxicity information : If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the oesophagus and the stomach.

Section 12: Ecological information

12.1. Toxicity

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12.2. Persistence and degradability

12.3. Bioaccumulative potential

12.4. Mobility in soil

12.5. Results of PBT and vPvB assessment

12.6. Other adverse effects

Additional ecological information

Result : Do not flush into surface water or sanitary sewer system.
 Avoid subsoil penetration.
 Danger to drinking water if even extremely small quantities leak into soil.
 Harmful effects to aquatic organisms due to pH-shift.

Section 13: Disposal considerations

13.1. Waste treatment methods

Product : Disposal together with normal waste is not allowed. Special disposal required according to local regulations. Do not let product enter drains. Contact waste disposal services.

Contaminated packaging : Empty remaining contents. Packagings that cannot be cleaned are to be disposed of in the same manner as the product. Dispose of in accordance with local regulations.

European Waste Catalogue Number : No waste code according to the European Waste Catalogue can be assigned for this product, as the intended use dictates the assignment. The waste code is established in consultation with the regional waste disposer.

Section 14: Transport information

14.1. UN number

2922

14.2. UN proper shipping name

ADR : CORROSIVE LIQUID, TOXIC, N.O.S.
 (Nitric acid, Hydrofluoric acid)

RID : CORROSIVE LIQUID, TOXIC, N.O.S.
 (Nitric acid, Hydrofluoric acid)

IMDG : CORROSIVE LIQUID, TOXIC, N.O.S.
 (Nitric acid, Hydrofluoric acid)

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14.3. Transport hazard class(es)

ADR-Class (Labels; Classification Code; Hazard identification No; Tunnel restriction code)	: 8 8, 6.1; CT1; 86; (E)
RID-Class (Labels; Classification Code; Hazard identification No)	: 8 8, 6.1; CT1; 86
IMDG-Class (Labels; EmS)	: 8 8, 6.1; F-A, S-B

14.4. Packaging group

ADR	: II
RID	: II
IMDG	: II

14.5. Environmental hazards

Labeling according to 5.2.1.8 ADR	: no
Labeling according to 5.2.1.8 RID	: no
Labeling according to 5.2.1.6.3 IMDG	: no
Classification as environmentally hazardous according to 2.9.3 IMDG	: no

14.6. Special precautions for user

Not applicable.

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

IMDG : Not applicable.

Section 15: Regulatory information

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

Other regulations : Occupational restrictions: Take note of Dir 92/85/EEC on the safety and health of pregnant workers at work and of Dir 94/33/EC on the protection of young people at work.

15.2. Chemical Safety Assessment

no data available

Section 16: Other information

PICKLE HF ACID/NITRIC ACID**Full text of R-phrases referred to under sections 2 and 3.**

R 8	Contact with combustible material may cause fire.
R23/24/25	Toxic by inhalation, in contact with skin and if swallowed.
R26/27/28	Very toxic by inhalation, in contact with skin and if swallowed.
R35	Causes severe burns.

Full text of H-Statements referred to under sections 2 and 3.

H272	May intensify fire; oxidiser.
H300	Fatal if swallowed.
H301	Toxic if swallowed.
H310	Fatal in contact with skin.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H330	Fatal if inhaled.
H331	Toxic if inhaled.

Further information

Other information : The information provided in this Safety Data Sheet is correct to our knowledge at the date of its revision. The information given only describes the products with regard to safety arrangements and is not to be considered as a warranty or quality specification and does not constitute a legal relationship. The information contained in this Safety Data Sheet relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text

|| Indicates updated section.