

Safety Data Sheet

According to REACH Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 with amendments



Iperen IPE® liquid | 3 - 15 - 0

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

1.1. Product identifier

Product form : Mixture
Trade name : Iperen IPE® liquid | 3 - 15 - 0

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

1.2.1. Relevant identified uses
Main use category : Professional use, Industrial use
Use of product : Fertilizer
1.2.2. Uses advised against
Restrictions on use : Uses against are not known

1.3. Details of the supplier of the safety data sheet

Van Iperen International BV
Smidsweg 24
3273 LK Westmaas - Nederland
T +31 (0) 186 578 888 - F +31 (0) 186 573 452
info@iperen.com - www.vaniperen.com

1.4. Emergency telephone number

In case of emergency contact the national emergency telephone number: UK and Ireland: 112 or 999

Country	Official advisory body	Address	Emergency number
Ireland (Republic of)	National Poisons Information Centre Beaumont Hospital	Beaumont Hospital Beaumont Road 9 Dublin	: +353 1 8379964
United Kingdom	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER London	0870 243 2241

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture Classification according to Regulation (EC) No. 1272/2008 [CLP]

Corrosive to metals, Category 1 H290
Skin corrosion/irritation, Category 2 H315
Serious eye damage/eye irritation, Category 2 H319
Full text of hazard classes and H-statements : see section 16

Adverse physicochemical, human health and environmental effects
No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS05

CLP Signal word : Warning
Hazard statements (CLP) : H290 - May be corrosive to metals
H315 - Causes skin irritation
H319 - Causes serious eye irritation
Precautionary statements (CLP) : P264 - Wash hands thoroughly after handling
P280 - Wear protective gloves, protective clothing, eye protection
P332+P313 - If skin irritation occurs: Get medical advice/attention
P337+P313 - If eye irritation persists: Get medical advice/attention
P362+P364 - Take off contaminated clothing and wash it before reuse
P390 - Absorb spillage to prevent material damage

2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

Safety Data Sheet

According to REACH Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 with amendments



Iperen IPE® liquid / 3 - 15 - 0

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Phosphoric acid, (Note B)	(CAS No) 7664-38-2 (EC no) 231-633-2 (EC index no) 015-011-00-6 (REACH no) 01-2119485924-24	<= 20	Met. Corr. 1, H290 Skin Corr. 1B, H314

Specific concentration limits:

Name	Product identifier	Specific concentration limits
Phosphoric acid, aqueous solution	(CAS No) 7664-38-2 (EC no) 231-633-2 (EC index no) 015-011-00-6 (REACH no) 01-2119485924-24	(10 =<C < 25) Eye Irrit. 2, H319 (10 =<C < 25) Skin Irrit. 2, H315 (C >= 25) Skin Corr. 1B, H314

Note B : Some substances (acids, bases, etc.) are placed on the market in aqueous solutions at various concentrations and, therefore, these solutions require different classification and labelling since the hazards vary at different concentrations. In Part 3 entries with Note B have a general designation of the following type: 'nitric acid ... %'. In this case the supplier must state the percentage concentration of the solution on the label. Unless otherwise stated, it is assumed that the percentage concentration is calculated on a weight/weight basis. Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	:Check the vital functions. Unconscious: maintain adequate airway and respiration. Respiratory arrest: artificial respiration or oxygen. Cardiac arrest: perform resuscitation. Victim conscious with laboured breathing: half-seated. Victim in shock: on his back with legs slightly raised. Vomiting: prevent asphyxia/aspiration pneumonia. Prevent cooling by covering the victim (no warming up). Keep watching the victim. Give psychological aid. Keep the victim calm, avoid physical strain. Depending on the victim's condition: doctor/hospital.
First-aid measures after inhalation	:Remove the victim into fresh air. If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Unconscious: maintain adequate airway and respiration. Respiratory problems: consult a doctor/medical service.
First-aid measures after skin contact	:Wash with plenty of soap and water. Do not apply (chemical) neutralizing agents. Take victim to a doctor if irritation persists.
First-aid measures after eye contact	:Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Do not apply neutralizing agents. Take victim to an ophthalmologist if irritation persists.
First-aid measures after ingestion	:Rinse mouth with water. Immediately after ingestion: give lots of water to drink. Do not induce vomiting. Consult a doctor/medical service if you feel unwell. Ingestion of large quantities: immediately to hospital.

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

Symptoms/injuries after inhalation	:Coughing. Dry/sore throat. Irritation of the respiratory tract. Irritation of the nasal mucous membranes. Following symptoms may appear later: Respiratory difficulties. Risk of lung oedema.
Symptoms/injuries after skin contact	:Causes skin irritation. Symptoms may include: Tingling/irritation of the skin. Red skin.
Symptoms/injuries after eye contact	:Causes serious eye irritation. Symptoms may include: Redness of the eye tissue. Pain. Lacrimation.
Symptoms/injuries after ingestion	:Nausea. Vomiting. Cramps/uncontrolled muscular contractions.

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

Treat symptomatically. Follow the advices in chapter 4.1.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	:Extinguishing media for surrounding fires : All extinguishing media allowed. Use fire extinguishing methods suitable to surrounding conditions.
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5.2. Special hazards arising from the substance or mixture

Fire hazard	:Non combustible.
Explosion hazard	:No direct explosion hazard.
Hazardous decomposition products in case of fire :	On heating/burning: release of toxic and corrosive gases/vapours ammonia nitrous vapours carbon monoxide - carbon dioxide

Safety Data Sheet

According to REACH Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 with amendments



Iperen IPE® liquid | 3 - 15 - 0

5.3. Advice for firefighters

Precautionary measures fire	:Exposure to fire/heat: keep upwind, consider evacuation and have neighbourhood close doors and windows.
Firefighting instructions	:Cool tanks/drums with water spray/remove them into safety. Dilute toxic gases with water spray.
Protection during firefighting	:Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents. Heat/fire exposure: compressed air/oxygen apparatus.
Other information	:Do not allow run-off from fire-fighting to enter drains or water courses.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Avoid all eye and skin contact and do not breathe vapour and mist. Ensure adequate air ventilation.
6.1.1. For non-emergency personnel	
Protective equipment	:Wear protective gloves/protective clothing/eye protection as advised in section 8.
Emergency procedures	:Mark the danger area. Keep containers closed. Wash contaminated clothes. In case of reactivity hazard: consider evacuation.
6.1.2. For emergency responders	
Protective equipment	:Wear protective gloves/protective clothing/eye protection as advised in section 8.

6.2. Environmental precautions

Contain leaking substance, pump over in suitable containers. Stop leaks if possible. Prevent spreading in sewers. Prevent soil and water pollution.

6.3. Methods and material for containment and cleaning up

For containment	:Contain released substance, pump into suitable containers. Stop leaks if possible.
Methods for cleaning up	:Take up liquid spill into absorbent material, e.g.: dry sand/earth. Scoop absorbed substance into closing containers. Clean contaminated surfaces with an excess of water. Wash clothing and equipment after handling.
Other information	:Use corrosionproof equipment. Use non-corrodable disposal containers. Dispose the product, depending on the degree and type of contamination, either as fertilizer or in an authorized waste disposal site.

6.4. Reference to other sections

See section 1 for emergency contact information.

See section 8 for information on appropriate personal protective equipment. See section 13 for additional waste treatment information

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	:Wear protective gloves/protective clothing/eye protection as advised in section 8. Avoid contact with skin and eyes. Avoid splashing. Do not breathe vapor or mist. Carry operations in the open/under local exhaust/ventilation or with respiratory protection. Observe normal hygiene standards. Keep container tightly closed. Meet the legal requirements.
Hygiene measures	:Do not eat, drink or smoke during use. If on skin, take off contaminated clothing. Care for eyewashstations at the workplace. Always wash hands after handling the product. Always wash hands after handling the product. Do not discharge the waste into the drain.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures	:Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight.
Storage conditions	:Store in original container.
Incompatible products	:Strong bases.
Incompatible materials	:May be corrosive to some metals.
Storage temperature	:0 - 30 °C
Prohibitions on mixed storage	:Keep substance away from: (strong) bases.
Storage area	:Store in a cool area. Store in a dry area. Meet the legal requirements.
Special rules on packaging	:Special or additional requirements: closing. correctly labelled. meet the legal requirements. Secure fragile packagings in solid containers.
Packaging materials	:Suitable material: polyethylene, polypropylene, stainless steel Material to avoid: aluminium, copper, lead, zinc, iron

7.3. Specific end use(s)

Fertilizers.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Phosphoric acid, aqueous solution (7664-38-2)

EU	IOELV TWA (mg/m³)	1 mg/m³ EU; Time-weighted average exposure limit 8 h;
EU	IOELV STEL (mg/m³)	2 mg/m³ EU; Short time value;

8.2. Exposure controls

Appropriate engineering controls	: Care for eyewashstations at the workplace.
Personal protective equipment	: Gloves. Protective clothing. Safety glasses.

Safety Data Sheet

According to REACH Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 with amendments

Iperen IPE[®] liquid | 3 - 15 - 0



Hand protection : Gloves

Material selection gloves : Good resistance gives: butyl rubber, Nitrile rubber. Take advice to your gloves' supplier

Type	Material	Permeation	Thickness (mm)	Standard
Reusable gloves	Butyl rubber		6 (> 480 min)	0.7 EN 374
Reusable gloves	Nitrile rubber (NBR)	6 (> 480 min)		0.4 EN 374

Eye protection : Safety glasses

Skin and body protection: : Wear suitable protective clothing

Respiratory protection : Mist formation: aerosol mask with filter type P2

Environmental exposure controls : In some cases process modifications will be necessary to reduce emissions to acceptable levels.

Emissions from ventilation or work process equipment should be checked to ensure they comply with legislation.

Other information : Minimisation of manual phases. Avoid contact with contaminated tools and objects. Regular cleaning of equipment, work area and clothing. Training staff on good practice. Use good personal hygiene practices.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Liquid.
Colour	: Black.
Odour	: Mild odour.
pH	: ≤ 2
Crystallization temperature	: -8 °C
Explosive limits	: No data available
Vapour pressure	: 2300 hPa (as water)
Density	: 1.19 kg/l
Solubility	: Water: completely soluble in water
Explosive properties	: Not explosive.
Oxidising properties	: Not oxidising.

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Substance has acid reaction.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Reacts violently with (strong) bases.

10.4. Conditions to avoid

Avoid high temperatures. Keep out of frost.

10.5. Incompatible materials

Reactive or incompatible with the following materials: strong bases. halogens. Corrosive to brass, bronze, copper and aluminium. Contact your sales representative or a metallurgical specialist to ensure compatibility with your equipment.

10.6. Hazardous decomposition products

On burning: release of toxic and corrosive gases/vapours (nitrous vapours, ammonia, carbon monoxide - carbon dioxide).

Safety Data Sheet

According to REACH Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 with amendments



Iperen IPE® liquid | 3 - 15 - 0

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified (Based on available data, the classification criteria are not met)
Phosphoric acid, aqueous solution (7664-38-2)
LD50 oral rat 2600 mg/kg (Rat OECD 423)
LD50 dermal rabbit 2740 mg/kg
LC50 inhalation rat (mg/l) 3846 mg/l (1-h)
Skin corrosion/irritation : Causes skin irritation. pH: ≤ 2
Serious eye damage/irritation : Causes serious eye irritation. pH: ≤ 2
Respiratory or skin sensitisation : Not classified (Based on available data, the classification criteria are not met)
Germ cell mutagenicity : Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity : Not classified (Based on available data, the classification criteria are not met)
Reproductive toxicity : Not classified (Based on available data, the classification criteria are not met)
Specific target organ toxicity (single exposure) : Not classified (Based on available data, the classification criteria are not met)
Specific target organ toxicity (repeated exposure): Not classified (Based on available data, the classification criteria are not met)
Phosphoric acid, aqueous solution (7664-38-2)
NOAEL (oral, rat, 90 days) 250 mg/kg bodyweight/day (OECD 422)
Aspiration hazard : Not classified (Based on available data, the classification criteria are not met)

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Harmful to aquatic life with long lasting effects.
Ecology - water : pH shift. Harmful to aquatic life with long lasting effects.
Phosphoric acid, aqueous solution (7664-38-2)
LC50 fish 1 138 mg/l (LC50)

12.2. Persistence and degradability

IPE® liquid | 3 - 15 - 0
Persistence and degradability Will completely dissociate into ions.

12.3. Bioaccumulative potential

IPE® liquid | 3 - 15 - 0
Bioaccumulative potential Not established.

12.4. Mobility in soil

IPE® liquid | 3 - 15 - 0
Ecology - soil Soluble in water.

12.5. Results of PBT and vPvB assessment

IPE® liquid | 3 - 15 - 0
This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Other adverse effects

Other adverse effects : High concentration in receiving water will injure aquatic life by pH effect. May cause eutrophication.
Additional information : No other effects known

SECTION 13: Disposal considerations

13.1. Waste treatment methods

European List of Waste (LoW) code : 15 01 10* - packaging containing residues of or contaminated by dangerous substances
Depending on branch of industry and production process, also other EURAL codes may be applicable
Regional legislation (waste) : Disposal must be done according to official regulations.
Waste treatment methods : Do not discharge into drains or rivers. Dispose the product, depending on the degree and type of contamination, either as fertilizer or in an authorized waste disposal site. Empty and rinsed containers can be disposed as non-hazardous material or be returned for recycling.
Waste disposal recommendations : Remove waste in accordance with local and/or national regulations. Care should be taken when handling emptied containers that have not been cleaned or rinsed out.
Additional information : The user's attention is drawn to the possible existence of specific european, national or local regulations regarding disposal.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

UN-No. (ADR) : 1805
UN-No. (IMDG) : 1805

Safety Data Sheet

According to REACH Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 with amendments

Iperen IPE[®] liquid | 3 - 15 - 0

14.2. UN proper shipping name

Proper Shipping Name (ADR): PHOSPHORIC ACID, SOLUTION
Proper Shipping Name (IMDG): PHOSPHORIC ACID SOLUTION
Transport document description (ADR): UN 1805 PHOSPHORIC ACID, SOLUTION, 8, III, (E)
Transport document description (IMDG): UN 1805 PHOSPHORIC ACID SOLUTION, 8, III

14.3. Transport hazard class(es) ADR / IMDG

Transport hazard class(es) (ADR/IMDG): 8 Danger labels (ADR/IMDG): 8

:



14.4. Packing group

Packing group (ADR/IMDG): III

14.5. Environmental hazards

Dangerous for the environment: No
Marine pollutant: No
Other information: No supplementary information available

14.6. Special precautions for user

- Overland transport
Classification code (ADR): C1
Limited quantities (ADR): 5l
Excepted quantities (ADR): E1
Packing instructions (ADR): P001, IBC03, LP01, R001
Mixed packing provisions (ADR): MP19
Portable tank and bulk container instructions (ADR): T4
Portable tank and bulk container special provisions (ADR): TP1
Tank code (ADR): L4BN
Vehicle for tank carriage: AT
Transport category (ADR): 3

Special provisions for carriage - Packages (ADR): V12

Hazard identification number (Kemler No.): 80

Orange plates:



Tunnel restriction code (ADR): E

- Transport by sea

Special provisions (IMDG): 223
Limited quantities (IMDG): 5 L
Excepted quantities (IMDG): E1
Packing instructions (IMDG): P001, LP01
IBC packing instructions (IMDG): IBC03
Tank instructions (IMDG): T4
Tank special provisions (IMDG): TP1
EmS-No. (Fire): F-A
EmS-No. (Spillage): S-B
Stowage category (IMDG): A

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

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

15.1.2. National regulations Netherlands

Waterbezwaarlijkheid: 11 - Weinig schadelijk voor in het water levende organismen

Saneringsinspanningen: B - Lozing minimaliseren; toepassen van best uitvoerbare technieken

Safety Data Sheet

According to REACH Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 with amendments



Iperen IPE® liquid / 3 - 15 - 0

SZW-lijst van kankerverwekkende stoffen : None of the components are listed
SZW-lijst van mutagene stoffen : None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding: None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid: None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling: None of the components are listed

15.2. Chemical safety assessment

The chemical safety assessment has not been finalized
For the following substances of this mixture a chemical safety assessment has been carried out
Phosphoric acid, 75%, aqueous solution

SECTION 16: Other information

Version : 1.0 according to Regulation (EU) 2015/830
Revision date : 09/08/2016
Date of issue : 09/08/2016

Abbreviations and acronyms:

ADR European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE Acute Toxicity Estimate
BCF Bioconcentration factor
CLP Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DNEL Derived-No Effect Level
IMDG International Maritime Dangerous Goods
LD50 Median lethal dose
PBT Persistent Bioaccumulative Toxic
PNEC Predicted No-Effect Concentration
REACH Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
SDS Safety Data Sheet
vPvB Very Persistent and Very Bioaccumulative
STP Sewage treatment plant

Data sources : Information from suppliers. ECHA Website: Information on Registered Substances. BIG- database.
Training advice : Normal use of this product shall imply use in accordance with the instructions on the packaging. Before using/handling the

product one must read carefully the MSDS.

Full text of H- and EUH-statements:

Eye Irrit. 2 Serious eye damage/eye irritation, Category 2
Met. Corr. 1 Corrosive to metals, Category 1
Skin Corr. 1B Skin corrosion/irritation, Category 1B
Skin Irrit. 2 Skin corrosion/irritation, Category 2
H290 May be corrosive to metals
H314 Causes severe skin burns and eye damage
H315 Causes skin irritation
H319 Causes serious eye irritation

Company disclaimer

The information provided in this safety data sheet is correct to the best of our knowledge, information, and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal, and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any proceed, unless specified in the text.