

SAFETY DATA SHEET

Supreme Decree 57 of 2019, Regulation on Classification, Labeling, and Notification of Hazardous Chemicals and Mixtures

IPA Sustainable

Version 1.3

Revision Date 10/09/2024

Print Date 10/16/2024

1. Identification of the substance or mixture and of the company or undertaking

1.1 Product identifier

Product name : IPA Sustainable

Product code : S1160

CAS-No. : 67-63-0

Other means of identification : IPA, Isopropanol, Propan-2-ol, Propanol, sec-, Propyl alcohol, sec-, Dimethyl carbinol

1.2 Identified relevant uses of the substance or mixture and restrictions on use

Recommended use of the chemical and restrictions on use

Recommended use : Industrial Solvent.

Restrictions on use : This product must not be used in applications other than those listed in Section 1 without first seeking the advice of the supplier.

1.3 Details of the supplier of the safety data sheet

Manufacturer or supplier's details

Manufacturer/Supplier : **Shell CAPSA**
Av. Roque Saenz Peña 788
Buenos Aires, 1383
Argentina

Telephone : (+54 11) 4130-2168

Telefax : (+54 11) 4130-2180

1.4 Emergency telephone number

Emergency telephone number : En Argentina: (+11 15) 4970-7391 / 4970-7390 / 5062-6601 / 4973-7368; Desde el exterior: (+54 911) 4970-7391 / 4970-7390 / 5062/6601

2. Hazard or hazards identification

2.1 Classification of the substance or mixture

GHS Classification

Flammable liquids : Category 2

Eye irritation : Category 2

Specific target organ toxicity - single exposure (Inhalation, Oral) : Category 3 (Narcotic effects)

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GHS Label elements, including precautionary statements

2.2 Label elements

| | | |
|--------------------------|---|---|
| Hazard pictograms | : |   |
| Signal word | : | Danger |
| Hazard statements | : | PHYSICAL HAZARDS: H225 Highly flammable liquid and vapour. HEALTH HAZARDS: H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness. ENVIRONMENTAL HAZARDS: Not classified as an environmental hazard under GHS criteria. |
| Precautionary statements | : | Prevention: P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P243 Take action to prevent static discharges. Response: P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 If eye irritation persists: Get medical advice/attention. P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Storage: No precautionary phrases. Disposal: P501 Dispose of contents/ container to an approved waste disposal plant. |

2.3 Other hazards

Vapours are heavier than air. Vapours may travel across the ground and reach remote ignition sources causing a flashback fire danger. Even with proper grounding and bonding, this material can still accumulate an electrostatic charge. If sufficient charge is allowed to accumulate, electrostatic discharge and ignition of flammable air-vapour mixtures can occur. Slightly irritating to respiratory system.

3. Composition/information on ingredients

Substance / Mixture : Substance

3.1 Substances

IUPAC Name : Propan-2-ol
CAS-No. : 67-63-0

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UN number : 1219

Hazardous components

| Chemical name | CAS-No. EC-No. Registration number | GHS Classification | Concentration (% w/w%) |
|-------------------|---|---|---------------------------|
| Isopropyl alcohol | 67-63-0 | Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336 | <= 100 |

For explanation of abbreviations see section 16.

4. First Aid measures

4.1 Description of first aid measures

- General advice : Not expected to be a health hazard when used under normal conditions.
- If inhaled : Remove to fresh air. If rapid recovery does not occur, transport to nearest medical facility for additional treatment.
- In case of skin contact : Remove contaminated clothing. Flush exposed area with water and follow by washing with soap if available. If persistent irritation occurs, obtain medical attention.
- In case of eye contact : Immediately flush eye(s) with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. Transport to the nearest medical facility for additional treatment.
- If swallowed : If swallowed, do not induce vomiting: transport to nearest medical facility for additional treatment. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. If any of the following delayed signs and symptoms appear within the next 6 hours, transport to the nearest medical facility: fever greater than 101° F (38.3°C), shortness of breath, chest congestion or continued coughing or wheezing.

4.2 Protection of first-aiders

- Protection of first-aiders : When administering first aid, ensure that you are wearing the appropriate personal protective equipment according to the incident, injury and surroundings.

4.3 Most important symptoms and effects, both acute and delayed

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| | |
|---|--|
| Most important symptoms and effects, both acute and delayed | : Breathing of high vapour concentrations may cause central nervous system (CNS) depression resulting in dizziness, light-headedness, headache, nausea and loss of coordination. Continued inhalation may result in unconsciousness and death. No specific hazards under normal use conditions. Skin irritation signs and symptoms may include a burning sensation, redness, or swelling. Eye irritation signs and symptoms may include a burning sensation, redness, swelling, and/or blurred vision. If material enters lungs, signs and symptoms may include coughing, choking, wheezing, difficulty in breathing, chest congestion, shortness of breath, and/or fever. If any of the following delayed signs and symptoms appear within the next 6 hours, transport to the nearest medical facility: fever greater than 101° F (38.3°C), shortness of breath, chest congestion or continued coughing or wheezing. |
| Notes to physician | : IMMEDIATE TREATMENT IS EXTREMELY IMPORTANT! Call a doctor or poison control center for guidance. Potential for chemical pneumonitis. Treat symptomatically. |

5. Fire-fighting measures

5.1 Extinguishing media

| | |
|--------------------------------|--|
| Suitable extinguishing media | : Alcohol-resistant foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only. |
| Unsuitable extinguishing media | : None |

5.2 Special hazards arising from the substance or mixture

| | |
|--------------------------------------|---|
| Specific hazards during firefighting | : The vapour is heavier than air, spreads along the ground and distant ignition is possible. Carbon monoxide may be evolved if incomplete combustion occurs. |
|--------------------------------------|---|

5.3 Recommendations for fire-fighters

| | |
|---|---|
| Specific extinguishing methods | : Standard procedure for chemical fires. Clear fire area of all non-emergency personnel. Keep adjacent containers cool by spraying with water. |
| Special protective equipment for firefighters | : Proper protective equipment including chemical resistant gloves are to be worn; chemical resistant suit is indicated if large contact with spilled product is expected. Self-Contained Breathing Apparatus must be worn when approaching a fire in a confined space. Select fire fighter's clothing approved to |

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relevant Standards (e.g. Europe: EN469).

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Observe the relevant local and international regulations
Notify authorities if any exposure to the general public or the environment occurs or is likely to occur.
Local authorities should be advised if significant spillages cannot be contained.
The vapour is heavier than air, spreads along the ground and distant ignition is possible.
Vapour may form an explosive mixture with air.
Avoid contact with skin, eyes and clothing.
Isolate hazard area and deny entry to unnecessary or unprotected personnel.
Stay upwind and keep out of low areas.

6.2 Environmental precautions

Environmental precautions : Shut off leaks, if possible without personal risks. Remove all possible sources of ignition in the surrounding area. Use appropriate containment to avoid environmental contamination. Prevent from spreading or entering drains, ditches or rivers by using sand, earth, or other appropriate barriers. Attempt to disperse the vapour or to direct its flow to a safe location for example by using fog sprays. Take precautionary measures against static discharge. Ensure electrical continuity by bonding and grounding (earthing) all equipment.
Ventilate contaminated area thoroughly.
Monitor area with combustible gas indicator.

6.3 Methods and material for containment and cleaning up

Methods and materials for containment and cleaning up : For large liquid spills (> 1 drum), transfer by mechanical means such as vacuum truck to a salvage tank for recovery or safe disposal. Do not flush away residues with water. Retain as contaminated waste. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely. Remove contaminated soil and dispose of safely.
For small liquid spills (< 1 drum), transfer by mechanical means to a labeled, sealable container for product recovery or safe disposal. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely. Remove contaminated soil and dispose of safely.

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6.4 Reference to other sections

For guidance on selection of personal protective equipment see Section 8 of this Safety Data Sheet.,
For guidance on disposal of spilled material see Section 13 of this Safety Data Sheet.

7. Handling and storage

7.1 Precautions for safe handling

- | | |
|-------------------------|--|
| General Precautions | : Avoid breathing of or direct contact with material. Only use in well ventilated areas. Wash thoroughly after handling. For guidance on selection of personal protective equipment see Section 8 of this Safety Data Sheet. Use the information in this data sheet as input to a risk assessment of local circumstances to help determine appropriate controls for safe handling, storage and disposal of this material. Ensure that all local regulations regarding handling and storage facilities are followed. |
| Advice on safe handling | : Avoid contact with skin, eyes and clothing. Use local exhaust ventilation if there is risk of inhalation of vapours, mists or aerosols. Bulk storage tanks should be diked (bunded). Extinguish any naked flames. Do not smoke. Remove ignition sources. Avoid sparks. Electrostatic discharge may cause fire. Ensure electrical continuity by bonding and grounding (earthing) all equipment to reduce the risk. The vapours in the head space of the storage vessel may lie in the flammable/explosive range and hence may be flammable. Properly dispose of any contaminated rags or cleaning materials in order to prevent fires. Do NOT use compressed air for filling, discharging, or handling operations. |
| Avoidance of contact | : Strong oxidising agents. |
| Avoidance of contact | Strong oxidising agents. |
| Product Transfer | : Refer to guidance under Handling section. |

7.2 Conditions for safe storage, including any incompatibilities

- | | |
|-----------------------------|--|
| Conditions for safe storage | : The vapour is heavier than air. Beware of accumulation in pits and confined spaces. Refer to section 15 for any additional specific legislation covering the packaging and storage of this product. |
| Packaging material | : Suitable material: For containers, or container linings use mild steel, stainless steel. Unsuitable material: Natural, butyl, neoprene or nitrile rubbers. |

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Container Advice : Containers, even those that have been emptied, can contain explosive vapours. Do not cut, drill, grind, weld or perform similar operations on or near containers.

7.3 Specific end use(s)

Specific use(s) : Industrial Solvent.

Uses advised against : This product must not be used in applications other than those listed in Section 1 without first seeking the advice of the supplier.

8. Exposure controls and personal protection

8.1 Control parameters

| Components | CAS-No. | Value type (Form of exposure) | Control parameters / Permissible concentration | Basis |
|-------------------|--|----------------------------------|---|--------|
| Isopropyl alcohol | 67-63-0 | LPP | 350 ppm 858 mg/m3 | CL OEL |
| | Further information: Substances classified as 'A.4' are under consideration but have not yet valid information to be classified as carcinogenic to humans or laboratory animals, so the exposure of workers to them should be maintained at the lowest possible level. | | | |
| | | LPT | 500 ppm 1.230 mg/m3 | CL OEL |
| | Further information: Substances classified as 'A.4' are under consideration but have not yet valid information to be classified as carcinogenic to humans or laboratory animals, so the exposure of workers to them should be maintained at the lowest possible level. | | | |

Biological occupational exposure limits

No biological limit allocated.

8.2 Exposure controls

Monitoring Methods

Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls. For some substances biological monitoring may also be appropriate.

Validated exposure measurement methods should be applied by a competent person and samples analysed by an accredited laboratory.

Examples of sources of recommended exposure measurement methods are given below or contact the supplier. Further national methods may be available.

National Institute of Occupational Safety and Health (NIOSH), USA: Manual of Analytical Methods
<http://www.cdc.gov/niosh/>

Occupational Safety and Health Administration (OSHA), USA: Sampling and Analytical Methods
<http://www.osha.gov/>

Health and Safety Executive (HSE), UK: Methods for the Determination of Hazardous Substances

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<http://www.hse.gov.uk/>

Institut für Arbeitsschutz Deutschen Gesetzlichen Unfallversicherung (IFA) , Germany

<http://www.dguv.de/inhalt/index.jsp>

L'Institut National de Recherche et de Sécurité, (INRS), France <http://www.inrs.fr/accueil>

Engineering measures

: Use sealed systems as far as possible.
Adequate explosion-proof ventilation to control airborne concentrations below the exposure guidelines/limits.
Local exhaust ventilation is recommended.
Firewater monitors and deluge systems are recommended.
Eye washes and showers for emergency use.
Where material is heated, sprayed or mist formed, there is greater potential for airborne concentrations to be generated.
The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Select controls based on a risk assessment of local circumstances.
Appropriate measures include:

General Information:

Always observe good personal hygiene measures, such as washing hands after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned.
Practice good housekeeping.
Define procedures for safe handling and maintenance of controls.
Educate and train workers in the hazards and control measures relevant to normal activities associated with this product.
Ensure appropriate selection, testing and maintenance of equipment used to control exposure, e.g. personal protective equipment, local exhaust ventilation.
Drain down system prior to equipment break-in or maintenance.
Retain drain downs in sealed storage pending disposal or subsequent recycle.

Personal protective equipment

Protective measures

Personal protective equipment (PPE) should meet recommended national standards. Check with PPE suppliers.

Respiratory protection

: If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, select respiratory protection equipment suitable for the specific conditions of use and meeting relevant legislation.
Check with respiratory protective equipment suppliers.
Where air-filtering respirators are unsuitable (e.g. airborne concentrations are high, risk of oxygen deficiency, confined space) use appropriate positive pressure breathing apparatus.
Where air-filtering respirators are suitable, select an appropriate combination of mask and filter.

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If air-filtering respirators are suitable for conditions of use:
Select a filter suitable for organic gases and vapours [Type A boiling point >65°C (149°F)].

Hand protection Remarks

: Where hand contact with the product may occur the use of gloves approved to relevant standards (e.g. Europe: EN374, US: F739) made from the following materials may provide suitable chemical protection. Longer term protection: Butyl rubber. Nitrile rubber. Incidental contact/Splash protection: PVC or neoprene rubber gloves. For continuous contact we recommend gloves with breakthrough time of more than 240 minutes with preference for > 480 minutes where suitable gloves can be identified. For short-term/splash protection we recommend the same but recognize that suitable gloves offering this level of protection may not be available and in this case a lower breakthrough time maybe acceptable so long as appropriate maintenance and replacement regimes are followed. Glove thickness is not a good predictor of glove resistance to a chemical as it is dependent on the exact composition of the glove material. Glove thickness should be typically greater than 0.35 mm depending on the glove make and model. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturizer is recommended.

Eye protection

: Wear goggles for use against liquids and gas.
Wear full face shield if splashes are likely to occur.

Skin and body protection

: Wear antistatic and flame-retardant clothing, if a local risk assessment deems it so.
Skin protection is not required under normal conditions of use. For prolonged or repeated exposures use impervious clothing over parts of the body subject to exposure.
If repeated and/or prolonged skin exposure to the substance is likely, then wear suitable gloves tested to relevant Standard, and provide employee skin care programmes.

Thermal hazards

: Not applicable

Environmental exposure controls

General advice

: Local guidelines on emission limits for volatile substances must be observed for the discharge of exhaust air containing vapour.
Minimise release to the environment. An environmental assessment must be made to ensure compliance with local environmental legislation.
Information on accidental release measures are to be found in

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section 6.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

| | |
|--|---|
| Appearance | : Liquid. |
| Colour | : clear |
| Odour | : characteristic |
| Odour Threshold | : Data not available |
| pH | : Not applicable |
| Melting point/freezing point | : -88 °C / -126 °F |
| Boiling point, initial boiling point and boiling range | : 82 - 83 °C / 180 - 181 °F |
| Flash point | : 12 °C / 54 °F Method: Abel |
| Evaporation rate | : 1,5 Method: ASTM D 3539, nBuAc=1 |
| Upper explosion limit | : 12 %(V) |
| Lower explosion limit | : 2 %(V) |
| Vapour pressure | : 4,1 kPa (20 °C / 68 °F) |
| Relative vapour density | : 2 (20 °C / 68 °F) |
| Relative density | : 0,78 - 0,79 (20 °C / 68 °F) Method: ASTM D4052 |
| Density | : 785 - 786 kg/m3 (20 °C / 68 °F) Method: ASTM D4052 |
| Solubility(ies) | |
| Water solubility | : completely miscible |
| Solubility in other solvents | : Readily soluble in various organic solvents. |
| Partition coefficient: n-octanol/water | : log Pow: 0,05 |
| Auto-ignition temperature | : 425 °C / 797 °F Method: ASTM D-2155 |

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Decomposition temperature : Data not available

Viscosity

Viscosity, dynamic : 2,43 mPa.s Method: ASTM D445

Viscosity, kinematic : Data not available

Particle characteristics

Particle size : Data not available

9.2 Other information

Surface tension : 22,7 mN/m, 20 °C / 68 °F

Conductivity : Electrical conductivity: > 10,000 pS/m

A number of factors, for example liquid temperature, presence of contaminants, and anti-static additives can greatly influence the conductivity of a liquid, This material is not expected to be a static accumulator.

Molecular weight : 60,1 g/mol

10. Stability and reactivity

10.1 Reactivity

The product does not pose any further reactivity hazards in addition to those listed in the following sub-paragraph.

The product does not pose any further reactivity hazards in addition to those listed in the following sub-paragraph.

10.2 Chemical stability

No hazardous reaction is expected when handled and stored according to provisions

No hazardous reaction is expected when handled and stored according to provisions

10.3 Possibility of hazardous reactions

Hazardous reactions : Reacts with strong oxidising agents.

Reacts with strong oxidising agents.

10.4 Conditions to avoid

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Conditions to avoid : Avoid heat, sparks, open flames and other ignition sources.
Prevent vapour accumulation.
In certain circumstances product can ignite due to static electricity.

Avoid heat, sparks, open flames and other ignition sources.
Prevent vapour accumulation.
In certain circumstances product can ignite due to static electricity.

10.5 Incompatible materials

Materials to avoid : Strong oxidising agents.

Strong oxidising agents.

10.6 Hazardous decomposition products

: Thermal decomposition is highly dependent on conditions. A complex mixture of airborne solids, liquids and gases including carbon monoxide, carbon dioxide, sulphur oxides and unidentified organic compounds will be evolved when this material undergoes combustion or thermal or oxidative degradation.
Thermal decomposition is highly dependent on conditions. A complex mixture of airborne solids, liquids and gases including carbon monoxide, carbon dioxide, sulphur oxides and unidentified organic compounds will be evolved when this material undergoes combustion or thermal or oxidative degradation.

11. Toxicological information

11.1 Information on toxicological effects

Basis for assessment : Information given is based on product testing.
Unless indicated otherwise, the data presented is representative of the product as a whole, rather than for individual component(s).

Information on likely routes of exposure : Exposure may occur via inhalation, ingestion, skin absorption, skin or eye contact, and accidental ingestion.

Acute toxicity

Components:

Isopropyl alcohol:

Acute oral toxicity : LD50 Rat: > 5000 mg/kg
Remarks: Low toxicity

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Acute inhalation toxicity : LC50 Rat, male and female: > 10000 ppm
Exposure time: 6 h
Method: Test(s) equivalent or similar to OECD Test Guideline 403
Assessment: The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects.
Remarks: Low toxicity by inhalation.

Acute dermal toxicity : LD50 Rabbit: > 5000 mg/kg
Remarks: Low toxicity

Skin corrosion/irritation

Components:

Isopropyl alcohol:

Remarks: Not irritating to skin.

Serious eye damage/eye irritation

Components:

Isopropyl alcohol:

Species: Rabbit

Exposure time: 24 h

Method: Test(s) equivalent or similar to OECD Test Guideline 405

Remarks: Irritating to eyes.

Species: Rabbit

Exposure time: 48 h

Method: Test(s) equivalent or similar to OECD Test Guideline 405

Remarks: Irritating to eyes.

Species: Rabbit

Exposure time: 72 h

Method: Test(s) equivalent or similar to OECD Test Guideline 405

Remarks: Irritating to eyes.

Respiratory or skin sensitisation

Components:

Isopropyl alcohol:

Species: Guinea pig

Result: negative

Method: Buehler Test

Remarks: Not a sensitiser.

Based on available data, the classification criteria are not met.

Germ cell mutagenicity

Components:

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Isopropyl alcohol:

Remarks: Based on available data, the classification criteria are not met.

Remarks: Not mutagenic.

Carcinogenicity

Components:

Isopropyl alcohol:

Remarks: Not a carcinogen.

| Material | GHS/CLP Carcinogenicity Classification |
|-------------------|--|
| Isopropyl alcohol | No carcinogenicity classification. |

| Material | Other Carcinogenicity Classification |
|-------------------|---|
| Isopropyl alcohol | IARC: Group 3: Not classifiable as to its carcinogenicity to humans |

Reproductive toxicity

Components:

Isopropyl alcohol:

Remarks: Does not impair fertility., Not a developmental toxicant., Based on available data, the classification criteria are not met.

STOT - single exposure

Components:

Isopropyl alcohol:

Remarks: May cause drowsiness and dizziness.

STOT - repeated exposure

Components:

Isopropyl alcohol:

Remarks: Kidney: caused kidney effects in male rats which are not considered relevant to humans

Aspiration toxicity

11.2 Information on other hazards

Components:

Isopropyl alcohol:

Aspiration into the lungs when swallowed or vomited may cause chemical pneumonitis which can be fatal.

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Further information

Components:

Isopropyl alcohol:

Remarks: Exposure may enhance the toxicity of other materials., Classifications by other authorities under varying regulatory frameworks may exist.

12. Ecological information

Basis for assessment : Information given is based on product testing.
Unless indicated otherwise, the data presented is representative of the product as a whole, rather than for individual component(s).

12.1 Toxicity

Components:

Isopropyl alcohol :

Toxicity to fish (Acute toxicity) : Remarks: Practically non toxic:
LL/EL/IL50 > 100 mg/l

Toxicity to crustacean (Acute toxicity) : Remarks: Practically non toxic:
LL/EL/IL50 > 100 mg/l

Toxicity to algae/aquatic plants (Acute toxicity) : Remarks: Practically non toxic:
LL/EL/IL50 > 100 mg/l

Toxicity to microorganisms (Acute toxicity) : Remarks: Practically non toxic:
LL/EL/IL50 > 100 mg/l

Toxicity to fish (Chronic toxicity) : Remarks: Data not available

Toxicity to crustacean(Chronic toxicity) : Remarks: Data not available

12.2 Persistence and degradability

Components:

Isopropyl alcohol :

Biodegradability : Remarks: Readily biodegradable.
Oxidises rapidly by photo-chemical reactions in air.

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12.3 Bioaccumulative potential

Product:

Partition coefficient: n-octanol/water : log Pow: 0,05

Components:

Isopropyl alcohol :

Bioaccumulation : Remarks: Does not bioaccumulate significantly.

12.4 Mobility in soil

Components:

Isopropyl alcohol :

Mobility : Remarks: Dissolves in water., If the product enters soil, one or more constituents will or may be mobile and may contaminate groundwater.

12.5 Other adverse effects

no data available

Components:

Isopropyl alcohol :

Additional ecological information : Does not have ozone depletion potential.

13. Disposal considerations

13.1 Waste treatment methods

Waste from residues : Recover or recycle if possible.
It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste classification and disposal methods in compliance with applicable regulations.
Do not dispose into the environment, in drains or in water courses.
Waste product should not be allowed to contaminate soil or ground water, or be disposed of into the environment.
Waste, spills or used product is dangerous waste.

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Disposal should be in accordance with applicable regional, national, and local laws and regulations.

Local regulations may be more stringent than regional or national requirements and must be complied with.

MARPOL - see International Convention for the Prevention of Pollution from Ships (MARPOL 73/78) which provides technical aspects at controlling pollutions from ships.

Contaminated packaging : Drain container thoroughly.
After draining, vent in a safe place away from sparks and fire.
Residues may cause an explosion hazard.
Do not, puncture, cut, or weld uncleaned drums.
Send to drum recoverer or metal reclaimer.

Dispose in accordance with prevailing regulations, preferably to a recognized collector or contractor. The competence of the collector or contractor should be established beforehand.

14. Transport information

14.1 UN number or ID number

ADR : 1219
IMDG : 1219
IATA : 1219

14.2 UN proper shipping name

ADR : ISOPROPANOL
IMDG : ISOPROPANOL
IATA : ISOPROPANOL

14.3 Transport hazard class(es)

ADR : 3
IMDG : 3
IATA : 3

14.4 Packing group

ADR
Packing group : II
Classification Code : F1
Hazard Identification Number : 33
Labels : 3
IMDG
Packing group : II
Labels : 3
IATA

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Packing group : II
Labels : 3

14.5 Environmental hazards

ADR

Environmentally hazardous : no

IMDG

Marine pollutant : no

14.6 Special precautions for user

Remarks : Special Precautions: Refer to Section 7, Handling & Storage, for special precautions which a user needs to be aware of or needs to comply with in connection with transport.

14.7 Maritime transport in bulk according to IMO instruments

Pollution category : Z
Ship type : IBC Chapter 18 cargo, must be double hulled
Product name : Isopropyl alcohol

Additional Information : This product may be transported under nitrogen blanketing. Nitrogen is an odourless and invisible gas. Exposure to nitrogen enriched atmospheres displaces available oxygen which may cause asphyxiation or death. Personnel must observe strict safety precautions when involved with a confined space entry. Transport in bulk according to Annex II of Marpol and the IBC Code

15. Regulatory information

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

The regulatory information is not intended to be comprehensive. Other regulations may apply to this material.

DS 090 - 1996. Ministry of Economic Development and Reconstruction. DS 375 - 1985. Ministry of Economic Development and Reconstruction. DS 594 - 2000. Ministry of Health. DS 298 - 1995. Ministry of Transport and Telecommunications.

Other international regulations

The components of this product are reported in the following inventories:

AIIC : Listed
DSL : Listed
IECSC : Listed
ENCS : Listed
KECI : Listed
NZIoC : Listed
PICCS : Listed

SAFETY DATA SHEET

Supreme Decree 57 of 2019, Regulation on Classification, Labeling, and Notification of Hazardous Chemicals and Mixtures

IPA Sustainable

Version 1.3

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| | |
|------|----------|
| TSCA | : Listed |
| TCSI | : Listed |

16. Other information

Full text of H-Statements

| | |
|------|-------------------------------------|
| H225 | Highly flammable liquid and vapour. |
| H319 | Causes serious eye irritation. |
| H336 | May cause drowsiness or dizziness. |

Full text of other abbreviations

| | |
|------------|--|
| Eye Irrit. | Eye irritation |
| Flam. Liq. | Flammable liquids |
| STOT SE | Specific target organ toxicity - single exposure |

Abbreviations and Acronyms : The standard abbreviations and acronyms used in this document can be looked up in reference literature (e.g. scientific dictionaries) and/or websites.

Further information

Training advice : Provide adequate information, instruction and training for operators.

NFPA Rating (Health, Fire, Reactivity) 2, 3, 0

Other information : A vertical bar (|) in the left margin indicates an amendment from the previous version.

Sources of key data used to compile the Safety Data Sheet : The quoted data are from, but not limited to, one or more sources of information (e.g. toxicological data from Shell Health Services, material suppliers' data, CONCAWE, EU IUCLID date base, EC 1272 regulation, etc).

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.