

MANAGEMENT SYSTEM			FI-SMS_057
Isoamyl Alcohol			
Issue date: 08/08/2019	Revision Data: 09/03/2020	Revised: 02	Page: 1 of 9

MSDS – MATERIAL SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name:	Isoamyl Alcohol
Intern Code Product Identification:	PA00107
Company Name:	DEFAFES COMERCIO E EXPORTAÇÃO EIRELLI
Address:	Rua Urumajó, 200 - Tatuapé - São Paulo- SP - Brazil
Site:	www.defafes.com
Phone:	(11) 98276-1077

2. HAZARDS IDENTIFICATIONS

CAUTION HARMFUL PRODUCT! HARMFUL IF SWALLOWED OR INHALED MAY BE HARMFUL IF ABSORBED THROUGH SKIN. CAUSES IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT. AFFECTS CENTRAL NERVOUS SYSTEM. FUEL LIQUID AND STEAM.

Flammable liquids	Category 3
Skin Corrosion / Irritation	Category 2
Serious Eye Damage / Eye Irritation	Category 2
Specific target organ toxicity (single exposure)	Category 3

Hazard pictograms



Warning Words: Danger

Hazard statement: H225 - Highly flammable liquid and vapor.

MANAGEMENT SYSTEM			FI-SMS_057
Isoamyl Alcohol			
Issue date: 08/08/2019	Revision Data: 09/03/2020	Revised: 02	Page: 2 of 9

Precautionary statements:

P210 - Keep away from heat / sparks / hot surfaces. Do not smoke.

P233 - Keep container tightly sealed

P240 - Ground product container and receiver during shipments

P241 - Use ventilation equipment

P242 - Use only non-sparking tools

P243 - Avoid build up of electrostatic charges

P280 - Wear personal protective equipment

P303 + P361 + P353 - In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water

P370 + P378 - In case of fire: Use for extinction: CO2, foam.

P403 + P235 - Store in a well-ventilated place. Keep in a cool place.

P501 - Dispose of contents / container to approved waste disposal facility

POTENTIAL HEALTH EFFECTS

- By inhalation: May cause irritation to mucous membranes and respiratory tract. It can produce headache, dizziness, nausea, vomiting and diarrhea. High concentrations can produce narcosis and death.
- If swallowed: May cause abdominal pain and vomiting. Other symptoms are similar to those of inhalation.
- Skin Contact: May cause irritation with redness and pain.
- Eye Contact: Vapors may produce eye irritation. Splashes can cause severe pain and irritation.
- Chronic Exposure: Repeated and prolonged skin contact causes injury.
- Aggravation of pre-existing conditions: People with pre-existing skin, eye, kidney, and liver and lung problems are more sensitive to the effects of the substance.

3. COMPOSITION AND INFORMATION ABOUT INGREDIENTS

Common Name or Commercial Name	C.A.S. Number	Concentration Range (%)
Isoamyl alcohol	123-51-3	99

4. FIRST AIDS MEASURES

General Advice

If symptoms persist, call a physician.

MANAGEMENT SYSTEM			FI-SMS_057
Isoamyl Alcohol			
Issue date: 08/08/2019	Revision Data: 09/03/2020	Revised: 02	Page: 3 of 9

Skin contact	Remove contaminated clothing. Wash skin with water and mild soap for at least 15 minutes. Seek medical attention if irritation persists
Eyes contact	Wash with water during 15 minutes. Do not allow victim to rub eyes. Get medical attention.
Inhalation	Move to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur.
Ingestion	Clean mouth water and drink afterwards plenty of water.
Action to be taken	Do not perform procedures for which you have not been trained. Do not force ingestion of solid or liquid substances when the victim is unconscious. Do not use medication without medical advice.
Protection for the provider Of aid emergency.	Check site safety conditions before starting treatment Provide this information sheet for the aid providers. There is no specific antidote.
Notes to Physician	Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Extinguishing material:	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Cool closed containers exposed to fire with water spray. Not Recommended: Water jet directly.
Specific hazards during firefighting	Prevent buildup of vapors or gases to explosive concentrations Cool closed containers exposed to fire with water spray. Forms peroxides of unknown stability. Vapors may form explosive mixtures with air
Hazardous combustion products	No hazardous combustion products known.

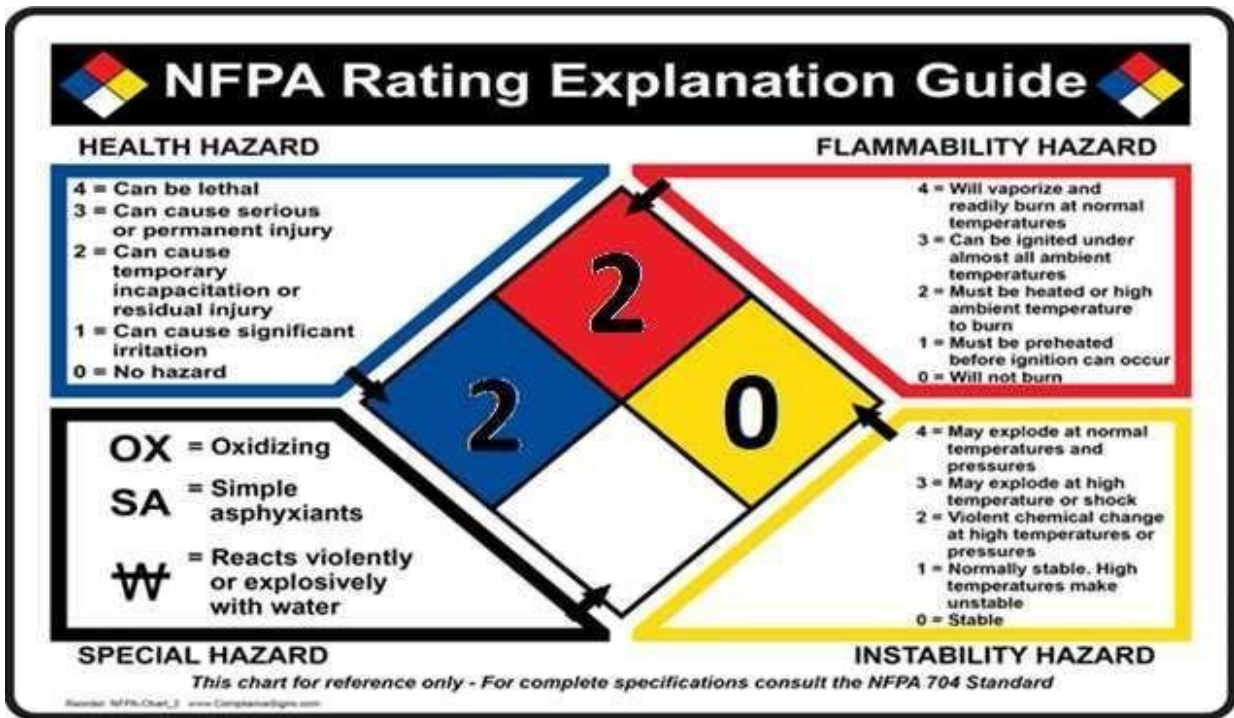
MANAGEMENT SYSTEM			FI-SMS_057
Isoamyl Alcohol			
Issue date: 08/08/2019	Revision Data: 09/03/2020	Revised: 02	Page: 4 of 9

Further information

Flammable liquid and vapor. Use water spray to cool unopened containers. Prevent buildup of vapors or gases to explosive concentrations.

Special protective equipment for fire-fighters

In the event of fire, wear self-contained breathing apparatus.



6. CONTROL MEASURES TO SPILL

Personal precautions

Avoid breathing vapor / mist / gas. Eye contact should avoided. Self-contained breathing apparatus recommended for large spills.

Safety Precautions

Eliminate all sources of ignition approximately the accidental release area. Air the area. Determine the need to evacuate and isolate the area according to your local emergency plan. Keep onlookers at a distance. Beware of the accumulation of vapors that may accumulate in low areas becoming explosive.

Environmental Precautions

Keep away from sewers, surface and groundwater. Report leaks to competent authorities if necessary.

MANAGEMENT SYSTEM			FI-SMS_057
Isoamyl Alcohol			
Issue date: 08/08/2019	Revision Data: 09/03/2020	Revised: 02	Page: 5 of 9

Methods for Cleaning Up

Contain spillage and recover spilled product with electrically protected vacuum cleaner or dry sweep and place liquid into containers for disposal in accordance with local regulations.

7. HANDLING AND STORAGE

Handling

Handle product with care and avoid spillage on the floor. Avoid inhalation and contact with eyes and skin. Contaminated clothing and shoes must be cleaned before reuse.

Storage

Store in a cool, dry, well-ventilated place. Store away from sources of ignition. Containers should be kept closed to minimize contamination.

Unsuitable materials

Not established.

Special procedure

Not established.

8. EXPOSITION CONTROL AND INDIVIDUAL PROTECTION

Respiratory Protection

In case of brief exposure or low pollution use respiratory filter device. In case of greater or intense exposure, wear self-contained breathing apparatus.

Ventilation

Provide adequate ventilation to keep exposure levels to a minimum.

Eye Protection

Use of goggles or visors recommended.

Hand Protection

Use of chemical resistant gloves recommended.
Glove material must be waterproof and resistant to the product.

Protective Clothing

Impervious clothing, flame retardant antistatic protective cloth, goggles at work. Skin contact should be avoided.

Special Controls of engineering

Not established.

Hygienic protection

Keep away from food, drink and feed.
Take off immediately when clothing is contaminated.

MANAGEMENT SYSTEM			FI-SMS_057
Isoamyl Alcohol			
Issue date: 08/08/2019	Revision Data: 09/03/2020	Revised: 02	Page: 6 of 9

Wash hands before breaks and at the end of work.

Avoid contact with skin and eyes.

9. PHYSICAL AND CHEMICAL PROPERTIES

Aspect (25°C):	Liquid
Odor:	Characteristic
Color:	Slightly yellow
pH	Not applicable
Melting Point	-117°C
Boiling Point	132°C
Flash Point	45°C (closed vase) / 55°C (open vase)
Evaporation Rate	Not applicable
Flammability (solid, gas)	Not applicable
Flammability or explosive limits	
Upper	9% vol
Lower	1,2% vol
Vapor pressure	0,4 KPa (20°C)
Vapor density	3,04 - (Air = 1,0)
Relative density (25°C)	0,810 g/cm ³
Solubility	Miscible
Coefficient of participation	Not available
n-octagonal / water	
Autoignition Temperature	350°C
Decomposition temperature	Not available

10. STABILITY AND REACTIVITY

Reactive Hazard	None known, based on information available
Stability and Reactivity	Stable under normal conditions of use, handling and storage.
Possibility of hazardous reactions	When heated, it may release corrosive and toxic gases.

MANAGEMENT SYSTEM			FI-SMS_057
Isoamyl Alcohol			
Issue date: 08/08/2019	Revision Data: 09/03/2020	Revised: 02	Page: 7 of 9

Conditions to be sent	Keep away from sources of ignition, high temperatures and incompatible materials.
Incompatible materials	Strong oxidizing agents, metals, alkali metals, halogens, acids anhydrides, acid chlorides, isocyanides.
Hazardous decomposition products	In case of combustion releases toxic gases such as carbon monoxide and carbon dioxide.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Oral LD50 - Rat - 5000 mg / kg

Dermal LD50 - Rabbit -> 3000 mg / kg

Primary irritability effect:

On the skin

irritates the skin and mucous membranes.

On the eye

Strong irritating effect with danger of serious damage to eyes.

Sensitization

Possible through skin contact.

12. ECOLOGICAL INFORMATION

Toxicity:

Aquatic Toxicity

LC50 - rainbow trout - 700 mg / l - 96h

Ground Mobility

High Mobility

Elimination (persistence and degradability):

Biodegradation: 84% / 27 d. readily biodegradable

Bio accumulative Potential

Not bio accumulative

Other adverse effects

Not available.

13. TREATMENT CONSIDERATION AND DISPOSAL

Waste

Place product in closed containers and dispose of in accordance with applicable local laws. Consult your local authority board.

Waste treatment

MANAGEMENT SYSTEM			FI-SMS_057
Isoamyl Alcohol			
Issue date: 08/08/2019	Revision Data: 09/03/2020	Revised: 02	Page: 8 of 9

- **Recommendations:** Should not disposed of with household waste. Do not allow it to reach the plumbing.
- **Packaging Contaminated** Dispose of in accordance with applicable local laws. Consult local authority board
- **Recommendations** Disposal should be in accordance with official regulations.

14. TRANSPORT INFORMATION

14.1. National and International Regulations:

- Land: National Land Transportation Agency (ANTT)
- Maritime: IMDG Code: 1105
- Air: IATA code: 1105

14.2. For product classified as hazardous for transport:

- ONU Number: 1105
- Proper Shipping Name: PENTALS
- Primary and subsidiary risk class / subclass: 3
- Risk Number: 30
- Packing group: III
- Environmental hazards: The product easily seeps into the soil.

15. REGULATIONS

15.1. Specific safety, health and environmental regulations for the chemical

- Flammable liquid

16. ANOTHER INFORMATIONS

Subtitles and abbreviations

ADR: Accord European sur le transport des marchandises dangereuses par Route (European Agreement concerning the international Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and labelling of Chemicals

MANAGEMENT SYSTEM			FI-SMS_057
Isoamyl Alcohol			
Issue date: 08/08/2019	Revision Data: 09/03/2020	Revised: 02	Page: 9 of 9

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (Division of the American Chemical Society)

This Safety Data Sheet was prepared in accordance with our present knowledge and experience, but does not imply warranties of any kind. Given the variety of factors that may affect your processing or application, the information in this security bulletin does not exempt processors from the responsibility of running their own tests and experiments.