

# MATERIAL SAFETY DATA SHEET

## SAFETY DATA SHEET FOR **AddX**

July 2019

1 Manufacturer and Distributor:

**AddX International Ltd**

Product:

Trade Name: AddX  
Application: Fuel Conditioner

2 Composition/ Information on Ingredients:

Ingredients: Processed and structured H302 /  
Isopropanol C<sub>3</sub>H<sub>7</sub>OH  
E133 Apple Green. CAS Registry  
Number: 7732-18-5 / 67-63-0 [EC #  
200-661-7] / 1934-21-0 / 3844-45-9

Binding Tariff Information  
HS code / TARIC: 3811.90.00.90

3 Hazardous Identification:

Hazardous Rating (HMIS):

*Hazard Rating Scale*

0 = Minimal 1 = Slight 2 = Moderate 3/4 = Serious;

G = Gloves/Goggles

- Health: 2
- Reactivity: 3
- Flammability: 3
- Protection: 3
- Hazardous Compounds: Isopropanol (CH<sub>3</sub>)<sub>2</sub>CHOH / CAS 67-63-0
- Environmental Effects: the product may be toxic for aquatic organisms
- Other Effects: (most active component) Acute health, Chronic health / FIRE

## Fire and Explosion Hazard:

General Information:	Product is combustible (most active component)
Flash Point (TOC):	32c (89.6 F)
Flammable Limits:	1.1 (lowest component)
Extinguishing Media:	NFBA Class B extinguishers (carbon dioxide or foam) for Class II liquid fires
Special Fire Fighting Procedures:	Water spray may be ineffective on fire but can protect fire-fighters & cool closed containers. Use fog nozzles if water is used. Do not enter confined fire-space without full bunker gear. (Helmet with face shield, bunker coats, gloves & rubber boots). Use NIOSH approved positive-pressure self-contained breathing apparatus
Unusual Fire and Explosion Hazards:	Keep container tightly closed. Isolate from oxidizers, heat & open flame. Closed containers may explode if exposed to extreme heat. Applying to hot surfaces requires special precautions. Empty container very hazardous! Continue all label precautions!
4 Health Hazard:	
Threshold Limit Value (TLV):	Not determined by American Conference of Governmental Industrial Hygienists (ACGIH) ACGIH
VENTILATION	
LOCAL EXHAUST:	Necessary
MECHANICAL (GENERAL):	Acceptable
SPECIAL:	None
OTHER:	None
Permissible Exposure Limit (PEL)	Please refer to ACGIH document, "Industrial Ventilation, A Manual of Recommended Practices", most recent edition, for details regarding Propanol. Not determined by Occupational Safety and Health Administration (OSHA)

Superfund Amendments and Reauthorization Act (SARA TITLE III): Isopropyl alcohol is listed as a reportable substance

(RQ) LIMIT: No reportable quantity

Route of Exposure: Eye, skin contact, aspiration, ingestion

Health Hazard from Acute/ Chronic Exposure The components of AddX with Isopropanol are not listed as carcinogenic by NTP, OSHA, or IARC

Medical Conditions generally recognised as being aggravated by exposure:  
None known

5 Emergency and First Aid Procedures:

Although AddX with Isopropanol is not expected to pose any specific health hazard the following precautions are recommended due to possible irritation from the Isopropanol component and <0.1% dye tracer contained in the product.

Individual dermal and respiratory sensitivities to AddX with Isopropanol will vary.

Ingestion: Do NOT induce vomiting. Have patient lie down & keep warm. Vomiting may lead to severe damage to oesophagus which may be fatal.

Eye Contact: Remove contact lenses at once, flush with water seek the advice of a physician immediately

Skin Contact: In case of contact with skin immediately remove contaminated clothing. Wash thoroughly with soap & water. Wash contaminated clothing before reuse

Personal Precautions: Take protective measures to avoid eye and skin contact

Environmental Precautions: Flush with water

Methods for Cleaning Up: Wash the area with plenty of water. Mop with absorbent materials and dispose of

Ventilation: Handle product in a normal, well-ventilated area

Inhalation: After high vapour exposure remove to fresh air. If breathing is difficult give oxygen. If breathing has stopped give artificial respiration.

Notes to a Physician: Foresee pre-admission medical exam and also periodic medical exam to the workers exposed to the product.

#### 6 Handling & Storage:

Handling: Staff should be aware a component is hazardous.

Storage: Keep product away from heat, to maintain quality. Store in a cool, dry place. Minimize product exposure to direct sunlight in hot climates. Store product in an area between 4°C (39F). – 32°C (89.6F). Store in a tightly sealed container.

#### 7 Exposure Controls/ Personal Protection:

Precautionary Measures: Availability of an eye wash station is recommended

Personal Protective Equipment: When handling the product wear approved protective clothing rubber or PVC gloves and a face shield

Threshold Limit Value: Not established

Requirements for periodic health check: Foresee pre-admission medical exam and periodic medical exam to the workers exposed to the product.

#### 8 Physical & Chemical Properties:

Appearance @ 20°C: Pale green solution, E133 Apple Green

Odour: Citrus with strong alcohol vapour / smell

Concentrate: 100%

*For Isopropanol element:*

0

0.786 g/cm<sup>3</sup> (20 °C)

<u>Melting point</u>	-89 °C, 184 K, -128 °F
<u>Boiling point</u>	82.6 °C, 356 K, 181 °F

*For processed H<sub>3</sub>O<sub>2</sub> element:*

Average Molecular Mass:	18
Solubility @ 20°C	
• Water:	Soluble
• Ethanol:	Soluble
• Acetone:	Soluble
• Aliphatic hydrocarbons:	Insoluble
Mass Density @ 25°C:	1
Viscosity @ 20°C:	
Melting Range:	0
Boiling Temperature	
@ 100kPa:	100°C
Vapour Pressure @ 20°C:	17.5mmHg
Vapour Density (air = 1):	N/A
Flash Point (PMcc):	N/A
Auto ignition Temperature:	N/A
Decomposition Temperature:	N/A
pH 1% Water Solution:	5.5 - 7.5
Explosion Properties:	N/A
Oxidizing Properties:	N/A
Specific Gravity @ 25°C:	1.00
Solubility in Water:	Miscible in all Proportions
Percent Volatile:	Not Volatile
Evaporation Rate (Ether = 1):	Not Established

## 9 Stability & Reactivity:

Stability:	Stable
Conditions to Avoid for Polymerisation:	None
Hazardous Decomposition Products:	Insignificant; mostly moisture, trace amounts of CO <sub>2</sub> and CO. H <sub>3</sub> O <sub>2</sub> element is <u>not</u> an oxygen donor. The C <sub>3</sub> H <sub>7</sub> OH compound <u>may</u> serve as a chemical reagent in itself by acting as a

Conditions to Avoid:	dihydrogen donor in transfer hydrogenation. Excessive heat or freezing
Materials to Avoid:	Strong oxidizing agents
Intended Use & Transformation:	It is not destined to undergo chemical transformation.

10 Toxicological Information:

Possible Routes of Penetration:	<i>H<sub>3</sub>O<sub>2</sub> element</i>	<i>C<sub>3</sub>H<sub>7</sub>OH element</i>
Ingestion:	Not toxic.	Toxic
Eye Contact:	Is not irritant	is an irritant
Skin Contact:	Is not irritant	is an irritant
Sensitization:	Not sensitizing	is sensitizing
Inhalation:	Possible only as aerosol either element may irritate the respiratory passages.	
Symptomology:	Not noted.	

11 Ecological Information:

Environmental Distribution: Water is likely to be the main transport medium for the chemical, to estimate its possible environmental distribution

Primary Biodegradability: The product fulfils the requisite minimum requirements of primary biodegradability

Ready Biodegradability: >99%

A Biotic Degradability: Not available

Theoretical Oxygen Demand (ThOd): 2.40

Chemical Oxygen Demand (COD): Isopropanol (2.22 mg/mg)0

Ecotoxicity:

Bacteria toxicity (EC 50): Isopropanol (1050 mg/l)  
Fish toxicity (LC 50) : Isopropanol (9280 mg/l)

12 Disposal Considerations:

Dispose of product in authorised places/ methods in observance with current laws

13 Transport Information:

A component of this product is dangerous for road, sea, air & rail transport  
namely; Isopropanol

14 Regulatory Information:

Classification & Labelling: (Directive 67/ 548/ EC & following  
amendments)

Symbols of Hazard: A component is harmful and dangerous in some  
environments

Risk Phrases: harmful if inhaled

Safety Advice: Avoid exposure to skin respiratory tract.  
Ventilate well

15 Shipping Classifications:

Shipping Name: AddX with Isopropanol

Hazard Class: 3

ID Number: P91-396

UN Number: 1993

Highway/Rail: Keep from freezing store between 4°C (39°F). –  
32°C (89.6°F). Store in a tightly sealed container

Air/Ship: Keep from freezing store between 4°C (39°F). –  
32°C (89.6°F). Store in a tightly sealed container



16 Regulatory Status:

- 16.1 NTP, OSHA & IARC do NOT list product as carcinogenic to humans.
- 16.2 Unused product is NOT listed by EPA as hazardous waste (40CR Part 261)
- 16.3 AddX with Isopropanol is NOT listed on California's Prop. 65 toxic substance list.
- 16.4 AddX with Isopropanol does NOT contain lead, cadmium, mercury, hexavalent chromium or has come into contact with these chemicals.
- 16.5 AddX with Isopropanol does NOT contain and is NOT manufactured with any Class I or II ozone depleting substances.
- 16.6 AddX with Isopropanol is a combustible liquid. It is hazardous under OSHA 29 CFR 1910.1200

17 Manufacturer:

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