

# Certificate

MSD 002



Health, Safety and  
Environmental Data

FUEL ENHANCEMENT ENZYME

Safety Data  
Sheet

## 1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING

Identification of substance / preparation

**Standard Kerosene, with Plant Bio Enzymes in suspension.**

### Application

Xmile is a proven fuel catalyst, which includes natural occurring enzymes that react with fossil fuel oils to enhance combustion and reduce emissions.

### Company Identification

XMILE Europe BV  
Velperweg 160  
6824 MD ARNHEM  
The Netherlands

### Emergency Telephone Number

+31(0)26 3638599 +31(0)26 4434474 Fax

## 2. COMPOSITION / INFORMATION ON INGREDIENTS

### Chemical Composition

A mixture of Kerosene streams containing small quantities of bio-enzymes.

### Hazardous Components

Kerosene - unspecified  
Xn, R10, R22, R38, R52/53

## 3. HAZARDS IDENTIFICATION

Flammable

As this material has a low flash point any spillage should be considered as a potential fire hazard.

Spray application increases the fire, and possible explosion, hazard.

Harmful if swallowed - aspiration hazard.

Likely to cause skin irritation.

## 4. FIRST - AID MEASURES

### Eyes

Wash eye thoroughly with copious quantities of water, ensuring eyelid are held open.

Obtain medical advice if any pain or redness develops or persists.

### Skin

Wash skin thoroughly with soap and water as soon as reasonably practicable. Remove heavily contaminated clothing and wash underlying skin.

### Ingestion

If contamination of the mouth occurs, wash out thoroughly with water. Except as a deliberate act, the ingestion of large amounts of product is unlikely. If it should occur, do not induce vomiting; obtain medical advice.

## 5. FIRE-FIGHTING MEASURES

For major fires call the Fire Service, Ensure an escape path is always available from any fire.

There is a danger of flashback if sparks or hot surfaces ignite vapour.

Use foam, dry powder, AAAF, CO<sub>2</sub>. DO NOT USE water jets. Avoid spraying directly into storage containers because of the danger of boil-over.

**FIRES IN CONFINED SPACES SHOULD BE DEALT WITH BY TRAINED PERSONNEL WEARING APPROVED BREATHING APPARATUS.**

Water may be used to cool nearby heat exposed areas/objects/packages.

### Combustion Products

Toxic fumes may be evolved on burning or exposure to heat.

See Stability and Reactivity, Section 7 of this Safety Data Sheet.

## 6. PHYSICAL AND CHEMICAL PROPERTIES

### Typical Values

Grades: Xmile

	Test Method	Units	Standard Grade
Physical state			liquid
Colour			colourless
Odour			kerosene-like
Density @ 15 <sup>0</sup> C	ASTM D 1298	kg / m <sup>3</sup>	790
Boiling point / range	ASTM D 86	<sup>0</sup> C	150-300
Flash point (Abel)	ASTM D 3828	<sup>0</sup> C	> 15
Explosion limits		%	0.6 - 6.5
Solubility in water		g / l	< 0.020
Partition Coefficient (n-octanol / water)		Log <sup>10</sup> P <sub>OW</sub>	>3

## 7. STABILITY AND REACTIVITY

### Conditions to Avoid

Stable at ambient temperatures.

Hazardous polymerisation reactions will not occur.

### Materials to Avoid

Avoid contact with strong oxidising agents.

### Hazardous Decomposition Products

Thermal decomposition can produce a variety of compounds, the precise nature of which will depend on the decomposition conditions.

Complete combustion / thermal decomposition will generate smoke, carbon dioxide and hazardous gases, which will include carbon monoxide.

## 8. ECOLOGICAL INFORMATION

### Mobility

Spillages may penetrate the soil causing ground water contamination.

### Persistence and degradability

This product is inherently biodegradable.

### Bio accumulative potential

There is no evidence to suggest bioaccumulation will occur.

### Aquatic toxicity

May be harmful to aquatic organisms.

Spills may form a film on water surfaces causing physical damage to organisms.

## 9. DISPOSAL CONSIDERATIONS

Dispose of via an authorised person / licensed waste disposal contractor in accordance with local regulations.

Dispose of product and container carefully and responsibly. Do not dispose of near ponds, ditches, down drains or on to soil.

Empty packages may contain some remaining product. Hazard warning labels are a guide to the safe handling of empty packaging and should not be removed.

## 10. TRANSPORT INFORMATION

ADR / RID - Hydrocarbons liquid, Flammable Liquid Class 3, Item 31(c) Hazard identification No 30

UN: KEROSENE, Flammable liquid, Class 3, packing group 111 UN Number 1223

IATA / ICAO: Kerosene, Flammable liquid, Class 3, Packing group 111

EMERGENCY ACTION CODE: Flammable liquid, 3 (Y)

## 11. REGULATORY INFORMATION

EC labelling

(No symbol) FLAMMABLE

(Xn) HARMFUL

Contains Kerosene - unspecified

R10 Flammable

R22 Harmful if swallowed

R38 Irritating to skin

S2 Keep out of reach of children

S23 Do not breathe vapour

S24 Avoid contact with skin

S43 In case of fire, use foam, dry powder, AAAF, CO<sub>2</sub> - never use water

S62 If swallowed, do not induce vomiting; seek medical advice immediately and show this container or label

## 12. OTHER INFORMATION

Legislation and other sources, which have been used in the compilation of this safety data sheet, include: -

Control of substances hazardous to health (General ACOP)

Control of Carcinogenic Substances (Carcinogens ACOP)

Approved codes of practice (HSE ref: L5)

Occupational exposure limits (HSE ref: EH40)

The storage of flammable liquids in containers (HSE ref.: HS(G) 51)

In circumstances where product is to be used outside the jurisdiction of the United Kingdom, such usage must be in conformity with the foregoing or national standards, whichever are more stringent.

This product is supplied on the understanding that it will be used in the manner and for the purpose specified in the product data sheet, the user / carrier having taken all precautions stipulated.

Failure to follow such directions may adversely affect any rights that the user / carrier might have against the company.

Before application other than as directed, advice must be obtained from the company.

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