

FOG ENHANCER

Code: 04410

Material Safety Data Sheet compliant with Regulation (EC) 2015/830

Version **6.0.0**

Creation date : **24/03/22**

Revision: **24/03/22**

Print Date : 29/07/22

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Trade name FOG ENHANCER

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

Use of the product

NEUTRAL LIQUID
LIVESTOCK
ADDITIVE TO IMPROVE THERMAL FOGGING FOR USE WITH
TERMINAL DISINFECTANTS

1.3. Details of the supplier of the safety data sheet

Company identification

Kilco (International) Ltd
Broomhouses 2 Industrial Estate
Old Glasgow Road
Lockerbie
United Kingdom
DG11 2SD
+44 (0) 1576 205480

1.4. Emergency telephone number

Emergency phone number

Emergency direct number (24 hours a day, 7 days a week) :
+65 3165 2217 (Asian area, Pacific area)
+44 1273 289451 (European area)
+1 215 207 0061 (Americas area)
+44 1235 239671 (Middle eastern countries and African area)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

The mixture doesn't meet the classification criteria provided for under Regulation (EC) No 1272/2008.

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2.2. Label elements

Labelling according to 1272/2008/EC Regulation:

Hazard pictograms(s) :

Not concerned

Signal word :

Not concerned

Hazard statement(s) :

Not concerned

Precautionary statement(s) :

Not concerned

2.3. Other hazards

No particular known hazard. No labelling requirement but general use precautions should be taken in handling chemicals.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Not applicable as this involves a mixture.

3.2. Mixtures

Chemical nature of the mixture : NEUTRAL LIQUID

Substance(s)	CAS number(s)	EINECS number(s)	No registration REACH	Classification according to Regulation (EC) 1272/2008	Type
Contains no dangerous substance.					

Type

- (1) : Substance classified as hazardous for health and/or the environment
- (2) : Substance with an exposure limit at the work station.
- Substance of very high concern candidate for the authorisation procedure:
- (3) : Substance considered as PBT (persistent, bioaccumulable, toxic)
- (4) : Substance considered as vPvB (very persistent, very bioaccumulable)
- (5) : Substance considered as carcinogenic category 1A
- (6) : Substance considered as carcinogenic category 1B
- (7) : Substance considered as mutagenic category 1A

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- (8) : Substance considered as mutagenic category 1B
(9) : Substance considered as reprotoxic category 1A
(10) : Substance considered as reprotoxic category 1B
(11) : Substance considered as endocrine disrupter

Full text of H- and EUH- phrases : see section 16.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General indications:

NEVER administer liquids/solids orally to an impaired or unconscious individual; place individual in left sideways position with the head lowered and the knees bent.

In case of faintness , get medical advice/attention. Show this safety data sheet to the doctor.

In the event of inhalation :

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.

In the event of contact with the skin :

Take off immediately all contaminated clothing.

Wash immediately and abundantly with water and soap.

Immediately call a POISON CENTER or doctor/physician.

In the event of contact with the eyes :

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a POISON CENTER or doctor/physician.

In the event of ingestion :

Rinse mouth.

Do NOT induce vomiting.

Call a POISON CENTER or doctor/physician.

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

Skin contact : FOG ENHANCER is not regarded as a preparation which is irritating to the skin.

Eye contact : FOG ENHANCER is not regarded as a mix which is irritating to the eyes.

Ingestion : Can induce mouth and digestive tract irritation .

Inhalation : Not considered as hazardous through inhalation under normal conditions of use.

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

Treatments : Symptomatic treatment

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

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Suitable extinguishing media :

Waterspray.

Foam, powder, carbon dioxide.

Unsuitable extinguishing media :

Large quantity of water.

5.2. Special hazards arising from the substance or mixture

FOG ENHANCER is non-flammable.

5.3. Advice for firefighters

Wear independent respiratory equipment and protective suit.

Collect contaminated firefighting water separately, must not be discharged into the drains.

Keep containers cool by spraying with water if exposed to fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel :

Wear suitable protective clothing.

Evacuate non-essential staff and those not equipped with individual protection apparatus.

6.1.2. For emergency responders :

Evacuate the personnel to a safe location.

Use personal protection equipment.

6.2. Environmental precautions

Do not discharge the product directly to sewer or to environment.

6.3. Methods and material for containment and cleaning up

Small spillage :

Collect in a boltable container; clean the contaminated zone with water and to air.

Wash with plenty of water.

Recover in a reservoir of help.

Large spillage :

Proceed the same way as in the case of a small discharge.

Never return spills in original containers for re-use.

Keep in suitable, properly labelled and closed containers for disposal.

6.4. Reference to other sections

Respect protective measures presented at heading 8.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Wear suitable protective clothing.

Avoid contact with skin, eyes and clothing.

Avoid breathing vapours/spray.

To handle in well ventilated zones.

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Product to be handled following good industrial hygiene and safety procedures.
 Take off immediately all contaminated clothing.
 Never return spilled product into its original container for re-use (risk of decomposition).
 Do not eat, drink or smoke in work area. Avoid projections during use.

7.2. Conditions for safe storage, including any incompatibilities

7.2.1. Storage :

Keep away from incompatible matters (see heading 10).
 Keep in a clean, cool and well-ventilated place away from sources of heat and intense light.
 Storage in the original, closed packaging, between +5°C and +30°C.
 Keep container closed.

7.2.2. Packaging or wrapping materials :

High density polyethylene recommended.

7.3. Specific end use(s)

No other recommendation.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure limit values :

Substance	CAS number	Country	Type	Value	Unit	Comments	source
Propane-1,2-diol	57-55-6	GBR	OEL 8h	150	ppm		International limit values for chemical agents
				474	mg/m ³		International limit values for chemical agents
			EMV (Exposure medium value) :	10	mg/m ³	(Brouillard)	MSDS supplier
		CAN	OEL 8h	50	ppm		International limit values for chemical agents (Ontario)
				155	mg/m ³		International limit values for chemical agents (Ontario)
		LVA	ELV (Exposure limit value) : 8h	7	mg/m ³		

8.2. Exposure controls

According to the requirements of Directive 98/24 /EC, the employer is required to conduct a risk assessment and implement appropriate risks management measures.

* For any situation where the absence of risk is not proven, he must consider the substitution or reduction of risk by improving in priority processes used and collective protection measures. The effectiveness of the solutions

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implemented will be checked by measurement in comparison to the statutory limit values for substances defined in Section 8.1.

* If the risk remains after these corrective actions, he must always check by routinely measuring compliance with regulatory OEL if they exist in section 8.1 and apply all the individual protective measures given in section 8.2.

* When formalized risk assessment indicates a low risk to workers' health, control of compliance with regulatory OEL may not be considered and all individual protection measures is not always mandatory.

8.2.1. Appropriate engineering controls :

Apply the necessary technical measures to comply with the professional exposure limit values.

8.2.2. Individual protection measures, such as personal protective equipment :

Eye/face protection :

No special protection measure is required.

Hand protection :

No special protection measure is required.

Skin protection :

No specific piece of clothing or skin protection is requested in normal conditions of use.

Respiratory protection :

None under normal conditions of use.

Thermal hazards :

Not applicable

Health measures :

After contact with skin, wash immediately and abundantly with water and soap, use neither abrasive product, nor solvent, nor fuel.

8.2.3. Environmental exposure controls :

Do not discharge the product directly to sewer or to environment.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

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Appearance	Liquid
Colour	Colourless, clear
Odour	Not available
Odour threshold	Not available
Pure pH	7±1.5
pH value at 10g/l	Not available
Freezing point	Not available
Boiling point	186 - 190 °C
Flash point	103 °C
Evaporation rate:	Not available
Flammability	Not available
Vapour pressure	0.186 mBar
Vapour density	Not available
Mass density	1.04±0.02 g/cm ³
Relative density	Not available
Solubility in water	No data
Partition coefficient: n-octanol/water	Not available
Auto-ignition temperature	Not applicable
Decomposition temperature	Not available
Viscosity	No data
Explosive properties	Not applicable
Oxidising properties	Not applicable

9.2. Other information

No additional information.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

None under normal conditions of use.

10.2. Chemical stability

Stable in the recommended storage and handling conditions.

10.3. Possibility of hazardous reactions

None to our knowledge.

10.4. Conditions to avoid

Temperatures lower than +5°C and higher than +30°C.

10.5. Incompatible materials

Strong acids.
Strong basis

10.6. Hazardous decomposition products

None to our knowledge in standard conditions of use.

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These data are given for the concentrated mixture. The use of the mixture under its diluted form must be performed in conformity with data given by the technical data sheet and the technical adviser.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Substance-related data:

Not available

Mix-related data:

Acute toxicity

. Not determined

Skin corrosion/irritation

Skin corrosivity . The mixture is not considered as corrosive for eyes according to the criteria of Regulation 1272/2008/EC.

Skin irritation . The mix is not considered to be irritating for the skin under the criteria of Regulation 1272/2008/EC.

Serious damage to eyes/eye irritation

Ocular corrosivity . The mixture is not considered as corrosive for eyes according to the criteria of Regulation 1272/2008/EC.

Eye irritation . The mix is not considered to be corrosive for the eyes or capable of causing serious irritation of the eyes under the criteria of Regulation 1272/2008/EC.

Respiratory / skin sensitisation

Skin sensitisation . The mixture is not considered as a skin sensitiser according to 1272/2008/EC Regulation.

Respiratory sensitisation . The mixture is not considered as a respiratory sensitiser according to 1272/2008/EC Regulation.

Mutagenicity

. The classification criteria are not met given the available data.

Carcinogenicity

. The classification criteria are not met given the available data.

Reproductive toxicity

. The classification criteria are not met given the available data.

Specific target organ toxicity - single exposure

. The classification criteria are not met given the available data.

Specific target organ toxicity - repeated exposure

. The classification criteria are not met given the available data.

Aspiration hazard

. The classification criteria are not met given the available data.

Most important symptoms and effects, both acute and delayed :

Skin contact : FOG ENHANCER is not regarded as a preparation which is irritating to the skin.

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Ingestion : Can induce mouth and digestive tract irritation .

Inhalation : Not considered as hazardous through inhalation under normal conditions of use.

SECTION 12: ECOLOGICAL INFORMATION

12.1. à 12.4. Toxicity - Persistence and degradability - Bioaccumulative potential - Mobility in soil

Substance-related data:

Not available

Mix-related data: :

Acute toxicity
fishes . No data available.
daphnia . No data available.
algae . No data available.

Chronic toxicity
. No data available.

Degradability
. The surface agents contained in this mix are in line with the requirements of the Detergent Regulation 648/2004/EC.

Bioaccumulation
. No data available.

Mobility
. No data available.

Conclusion :

The mixture is not considered to be dangerous for the environment according to 1272/2008/EC Regulation.

12.5. Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB

12.6. Other adverse effects

No additional information available.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Treatment of the mixture :

Do not discharge the product directly to sewer or to environment.
Comply with Directive 2008/98/EC of 19/11/2008 amended, relating to waste and to Decision 2000/532/EC (amended ultimately by Decision 2014/955/EC) that establishes a list of hazardous waste that must be taken to an approved centre.

Packaging treatment :

Rinse thoroughly the packaging with water and treat the effluent like wastes.
Comply with Directive 2008/98/EC of 19/11/2008 amended, relating to waste and to Decision 2000/532/

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EC (amended ultimately by Decision 2014/955/EC) that establishes a list of hazardous waste that must be taken to an approved centre.

SECTION 14: TRANSPORT INFORMATION

ROAD TRANSPORT:

Rail/Route (RID/ADR)

UN no :

UN proper shipping name : Not concerned (N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine)

Transport hazard class(es) :

Packing group :

Hazard identification number :

Label :

Tunnel code : (-)

Environmental hazard : No

Special precautions for user : No information.

Limited Quantity (QL):

MARITIME TRANSPORT :

IMDG

UN no :

UN proper shipping name : Not concerned (N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine)

Transport hazard class(es) :

Packing group :

Marine pollutant : No

Special precautions for user : No information.

EmS number :

Comply with the provisions of the IMDG on the physical separation of materials.Limited Quantity (QL):

Transport in bulk according to Annex II of MARPOL and the IBC Code :

Not concerned

SECTION 15: REGULATORY INFORMATION

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

Regulations relating to the hazards from major accidents :

SEVESO 3 Directive (2012/18/EC) : Not concerned

Regulations relating to the classification, packaging and labelling of substances and mixtures :

Regulation (EC) 1272/2008 amended.

Waste regulations :

2008/98/EC Directive amended by 2015/1127/EC Directive - Regulation 1357/2014/EC

Decision 2014/955/EC which establishes the list of hazardous waste.

Protection of workers :

Directive 98/24/EC of 07/04/1998 on the protection of the health and safety of workers from the risks related to chemical agents at work.

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Regulation (EU) 2019/1021 of 20 June 2019 on persistent organic pollutants : Not applicable

Regulation (EC) 1005/2009 amended on substances that deplete the ozone layer : Not applicable

Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors:

Not concerned

Regulation (EC) 648/2004 :

Not concerned

Comply with national and local legislation.

15.2. Chemical safety assessment

No

SECTION 16: OTHER INFORMATION

The safety data sheet is additional to the technical data sheet but does not replace it. The information given here in is to the best of our knowledge correct and is given in good faith. We must also draw the user's attention on potential risks of the product is used for other purposes for which the product is known.

In no way does it exempt users from being aware of and complying with regulations applicable to their activity. It is their sole responsibility to take all necessary precautions in accordance to the usage of the product they are aware of.

Regulations are only stated in order to help users fulfill the duties involved in the use of the product.

This description should not be considered as exhaustive. It does not exempt users from ensuring if other demands need to be complied with-according to other laws than the ones hereby stated and applicable to holding and usage of the product-demands for which they will remain sole responsibility.

Section(s) modified compared with the previous version :

Not concerned

List of H phrases referred to in sections 2 and 3 :

Sources of key data used to compile the data sheet :

Historical :

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Cancels and replaces previous version .