

SAFETY DATA SHEET**MAKS 1311M**

According to Regulation (EC) No. 1907/2008

Issue Date: 31.08.2015

Revision Date: 13.03.2023

Version: 02

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

PRODUCT NAME MAKS 1311M
APPLICATION CORROSION INHIBITOR
SUPPLIER BİMAKS KİMYA VE GIDA DIŞ TİCARET LTD. ŞTİ.
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2 HAZARD IDENTIFICATION**CLASSIFICATION OF THE SUBSTANCE OR MIXTURE:****Classification according to Regulation (EC) No 1272/2008**

Flammable Liquid (Category 3), H226

Skin corrosion (Category 1A), H314

Acute Toxicity (Category 4), H302+H312+H332

Specific Target Organ Toxicity, Single Exposure, (Category 3), H335

Reproductive toxicity (Category 2), H361 f

Aquatic Chronic (Category 3), H412

For the full text of the H-Statements mentioned in this Section, see Section 16.

LABEL ELEMENTS:**Labelling according Regulation (EC) No 1272/2008****PICTOGRAM:****SIGNAL WORD:** Danger**HAZARD STATEMENT(S):**

H226-Flammable liquid and vapour.

H314 Causes severe skin burns and eye damage.

H302+H312+H332-Harmful if swallowed, in contact with skin or if inhaled

H335-May cause respiratory irritation.

H361-Suspected of damaging fertility or the unborn child <fertility>.

H412-Harmful to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENT(S):

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P261: Avoid breathing dust/fume/gas/mist/vapours/spray.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P332+P313: If skin irritation occurs: Get medical advice/attention.

P337+P313: If eye irritation persists: Get medical advice/attention.

P312: Call a POISON CENTER/doctor/.../if you feel unwell.

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P403+P233: Store in a well-ventilated place. Keep container tightly closed.

Supplemental Hazard Statements: None

3 COMPOSITION/INFORMATION ON INGREDIENTS

CAS NO.	EINECS NO.	CHEMICAL NAME	WT %	CLASSIFICATION
-	-	Proprietary	20-40	Flam.Liq. 3 H226; Acute Tox.4,H302+H312; Skin Corr.1B, H314; Repr. 2, H361f
-	-	Proprietary	5-10	Flam.Liq. 3 H226; Acute Tox.3,H311+H331; Acute Tox.4, H302; Skin Corr.1A H314
-	-	Proprietary	5-15	Acute Tox.4,H302+H312+H332; Skin Corr.1B H314; STOT SE.3 H335 (C≥5)
3710-84-7	223-055-4	N,N-diethylhydroxylamine	1-5	Flam.Liq. 3 H226; Acute Tox.4,H312+H332; STOT SE.3 H335; Aquatic Chronic 2 H411

4 FIRST AID MEASURES**INHALATION:** Remove to fresh air, rest, treat symptomatically. Obtain medical attention immediately.**SKIN CONTACT:** Speed is essential. Remove contaminated clothing. Wash off affected area immediately with plenty of water. If severe burns have occurred and areas of skin are destroyed, cover the burned area with clean dry non fluffy material and obtain medical attention.**EYE CONTACT:** Speed is essential. Immediately gently irrigate with clean water for at least 15 minutes. Move eyeball and keep eyelids wide open and apart whilst irrigating. Obtain medical attention immediately.**INGESTION:** Do not induce vomiting without medical advice. If conscious washout mouth and give one pint of water to drink. Obtain medical attention immediately.**ADDITIONAL INFORMATION:** Note to Physician: Probable mucosal damage may contraindicate the use of gastric lavage. Measures against circulatory shock, respiratory depression and convulsions may be needed.**5 FIRE FIGHTING MEASURES****EXTINGUISHING MEDIA:** Use dry chemical, CO2, water spray (fog) or foam.**FIRE AND EXPLOSION HAZARD:** Flammable liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.**SPECIAL PROTECTIVE EQUIPMENT FOR FIRE FIGHTING:** Fire-fighters should wear appropriate protective equipment and selfcontained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.**HAZARDOUS COMBUSTION PRODUCTS:** Decomposition products may include the following materials: carbon oxides, nitrogen oxides

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6 ACCEDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: No action shall be taken involving any personal risk or without suitable training. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour or mist. Provide adequate ventilation. Put on appropriate personal protective equipment.

ENVIRONMENTAL PRECAUTIONS: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

METHODS FOR CLEANING UP: Large spill: Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Small spill: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor.

7 HANDLING AND STORAGE

HANDLING: Put on appropriate personal protective equipment. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by earthing and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous.

STORAGE CONDITIONS: Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

SUITABLE CONSTRUCTION MATERIAL : Use original container.

For specific dosages and customized applications please contact your BİMAKS representative.

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Effects	Exposure	DNEL	Most sensitive endpoint
Hazard limits for workers			
Inhallation-Systemic Effects	Long term Exposure	5 mg/m ³	
	Acute/short term Exposure	8.2 mg/m ³	
Inhallation-Local Effects	Long term Exposure	Medium hazard	Skin Irritation/ Corrosion
	Acute/short term Exposure	Medium hazard	Skin Irritation/ Corrosion
Dermal-Systemic Effects	Long term Exposure	0.4 mg/kg bw/day	Repeated Dose toxicity
	Acute/short term Exposure	0.8 mg/kg bw/day	Repeated Dose toxicity
Dermal-Local Effects	Long term Exposure	Medium hazard	Repeated Dose toxicity
	Acute/short term Exposure	Medium hazard	Repeated Dose toxicity
Eyes-Local Effects		Medium hazard.	

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Hazard limits for general population			
Inhallation-Systemic Effects	Long term Exposure	0.6 mg/m ³	Repeated Dose toxicity
	Acute/short term Exposure	1.2 mg/m ³	Repeated Dose toxicity
Inhallation-Local Effects	Long term Exposure	Not hazardous	Skin Irritation/ Corrosion
	Acute/short term Exposure	Not hazardous	Skin Irritation/ Corrosion
Dermal-Systemic Effects	Long term Exposure	0.2 mg/kg bw/day	Repeated Dose toxicity
	Acute/short term Exposure	0.4 mg/kg bw/day	Repeated Dose toxicity
Effects	Exposure	DNEL	Most sensitive endpoint
Dermal-Local Effects	Long term Exposure	Not hazardous	Skin Irritation/ Corrosion
	Acute/short term Exposure	Not hazardous	Skin Irritation/ Corrosion
Oral-Systemic Effects	Long term Exposure	0.2 mg/kg bw/day	Repeated Dose toxicity
Oral-Systemic Effects	Acute/Short term Exposure	0.4 mg/kg bw/day	Repeated Dose toxicity
Eyes		Medium hazard.	

Effects	Exposure	DNEL	Most sensitive endpoint
Hazard limits for workers			
Inhallation-Systemic Effects	Long term Exposure	91 mg/m ³	Repeated Dose toxicity
Inhallation-Local Effects	Long term Exposure	36 mg/m ³	Irritation (Respiratory Tract)
	Acute/short term Exposure	72 mg/m ³	Irritation (Respiratory Tract)
Dermal-Systemic Effects	Long term Exposure	1.04 mg/kg bw/day	Repeated Dose toxicity
Hazard limits for general population			
Inhallation-Systemic Effects	Long term Exposure	45 mg/m ³	Repeated Dose toxicity
Inhallation-Local Effects	Long term Exposure	3.2 mg/m ³	Irritation (Respiratory Tract)
	Acute/short term Exposure	18 mg/m ³	Irritation (Respiratory Tract)
Dermal-Systemic Effects	Long term Exposure	0.52 mg/kg bw/day	Repeated Dose toxicity
Oral-Systemic Effects	Long term Exposure	6.3 mg/kg bw/day	Repeated Dose toxicity
	Acute/short term Exposure	38 mg/kg bw/day	Acute Toxicity

Effects	Exposure	DNEL	Most sensitive endpoint
Hazard limits for workers			
Inhallation-Local Effects	Long term Exposure	3.3 mg/m ³	Repeated Dose toxicity
Dermal-Systemic Effects	Long term Exposure	1 mg/kg bw/day	Repeated Dose toxicity
Hazard limits for general population			
Inhallation-Local Effects	Long term Exposure	2 mg/m ³	Repeated Dose toxicity
Dermal-Systemic Effects	Long term Exposure	0.24 mg/kg bw/day	Repeated Dose toxicity
Oral-Systemic Effects	Long term Exposure	3.75 mg/kg bw/day	Repeated Dose toxicity

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Effects	Exposure	DNEL	Most sensitive endpoint
Hazard limits for workers			
Inhalation-Systemic Effects	Long term Exposure	3.65 mg/m ³ NOAEC: 274.4 mg/m ³	Repeated Dose toxicity
	Acute/short term Exposure	45.6 mg/m ³ LOAEC: 5132 mg/m ³	Acute toxicity
Inhalation-Local Effects	Long term Exposure	2.92 mg/m ³	Repeated Dose toxicity
	Acute/short term Exposure	8.76 mg/m ³ LOAEC: 5132 mg/m ³	Irritation (Respiratory Tract)
Effects	Exposure	DNEL	Most sensitive endpoint
Dermal-Systemic Effects	Long term Exposure	0.26 mg/kg bw/day	Repeated Dose toxicity
		79.17 mg/kg bw/day (NOAEL)	
	Acute/short term Exposure	4.7 mg/kg bw/day NOAEL: 707 mg/kg bw/day	Acute Toxicity-Dermal
Dermal-Local Effects	Acute/short term Exposure	Low hazard.	
Eyes-Local Effects		Low hazard.	
Hazard limits for general population			
Inhalation-Systemic Effects	Long term Exposure	0.65 mg/m ³ NOAEC: 97.5 mg/m ³	Repeated Dose toxicity
Oral-Systemic Effects	Long term Exposure	0.13 mg/kg bw/day	Repeated Dose toxicity
		79.2 mg/kg bw/day (NOAEL)	

ENGINEERING MEASURES: Use a closed dosing system. Local exhaust ventilation if necessary to control airborne levels below the exposure guidelines.

RESPIRATORY PROTECTION: Wear organic vapor respirator if ventilation is inadequate (filter-type A). Amine rich air will be displaced when refilling stock tanks. If it is necessary to remain near to the container at such times and the area is poorly ventilated an approved respirator should be worn.

HAND PROTECTION: Butyl gloves. Most glove materials are of low chemical resistance. Replace gloves regularly.

SKIN PROTECTION: Chemical resistant apron and boots

EYE PROTECTION: Chemical resistant goggles must be worn.

HYGIENE RECOMMENDATIONS: Keep an eye wash fountain available. Keep a safety shower available. Wash hands during breaks and at end of the shift. If clothing is contaminated, remove clothing and thoroughly wash the affected area. Launder contaminated clothing before reuse.

9 PHYSICAL AND CHEMICAL PROPERTIES

FORM	: Liquid
COLOUR	: Light yellow to dark brown
ODOUR	: Amine
FLASH POINT	: 65 °C
RELATIVE DENSITY	: 1.00 ± 0.05 (20 °C)
SOLUBILITY IN WATER	: Complete
pH (neat, 20°C)	: > 12.0 (20 °C)
VISCOSITY 20°C	: 3-7 cps
FREEZING POINT	: -3 °C

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Abbreviation: NE = not evaluated, NA = not applicable, NR = not relevant

NOTE : These physical properties are typical values for this product.

10 STABILITY AND REACTIVITY

STABILITY: Stable under ambient conditions

CONDITIONS TO AVOID: Heat. Freezing temperatures

MATERIALS TO AVOID: Acids, Oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of nitrogen, Oxides of carbon (under fire conditions).

11 TOXICOLOGICAL INFORMATION

Acute	Oral	Rat	LD 50: 1900 mg/kg bw
	Inhalation	Rat/Male-Female	LC 50: 8000 mg/m ³
	Dermal	Rabbit	LD 50: 500 mg/kg bw
Irritation	Dermal	Guinea Pig	Adverse effect observed (Corrosive)
	Respiratory	-	Adverse effect observed (irritating)
	Eye	Rabbit	Adverse effect observed (irritating)
Sensitisation	Dermal	Guinea Pig	Not sensitising
Repeated Dose	Inhalation/Systemic	Rat	NOAEC; 36 mg/m ³
	Oral	Rat	LOAEL: 500 mg/kg bw/day
Developmental toxicity	Oral	Rat	NOAEL; 750 mg/kg bw/day No adverse effect observed
Acute	Oral	Rat/Male-Female	LD 50: 1515 mg/kg bw
	Inhalation	Rat/Male-Female	LC 50: 1.3 mg/l air
	Dermal	Rabbit/Male-Female	LD 50: 2.46-2.83 ml/kg bw
Irritation	Dermal	Rabbit	Corrosive
	Eye	Rabbit	Corrosive
Repeated Dose	Inhalation	Rat/Male-Female	NOAEC; 10 mg/m ³ (Local) NOEC; 150 mg/m ³ (Systemic) Not specified
	Oral	Rat/Male-Female	NOAEL: 300 mg/kg bw/day Not specified.
Genotoxicity	Oral	Mouse/Male-Female	Negative
Reproduction	Oral	Rat/Male-Female	NOAEL: 300 mg/kg bw/day (Fertility) NOAEL: 1000 mg/kg bw/day

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			(Two-generation)
Developmental toxicity	Oral	Rat	NOAEL; 120 mg/kg bw/day (Maternal) NOAEL; 450 mg/kg bw/day (Teratogenicity)
Acute	Oral	Rat/Male	LD 50: 2190 mg/kg bw Adverse effect observed
	Inhalation	Rat/Male-Female	LC 50: 11400 mg/m ³ Adverse effect observed
	Dermal	Rabbit	LD 50: 1300 mg/kg bw Adverse effect observed
Irritation	Dermal	Rabbit	Adverse effect observed (irritating)
	Respiratory	Rat	Adverse effect observed (irritating)
	Eye	Rabbit	Adverse effect observed (irritating)
Sensitisation	Dermal	Guinea Pig/Male	Not sensitising
Repeated Dose	Inhalation/Systemic	Rat/Female-Male	NOAEC; 546 mg/m ³
	Inhalation/Local	Rat/Female-Male	NOAEC; 54.6 mg/m ³
Developmental toxicity	Oral	Rat	NOAEL; 568 mg/kg bw/day No adverse effect observed
Acute	Oral	Rat/Male	LD 50: 432 mg/kg bw NOAEL: 25 mg/kg bw
	Dermal	Rabbit/Male	LD 50: 275 mg/kg bw
Irritation	Dermal	Rabbit	Corrosive
	Eye	Rabbit	Category 1 (irreversible effects on the eye)
Sensitisation	Dermal	-	Sensitising
	Respiratory	Mouse/Male	210 mg/m ³ Minor irritant
Repeated Dose	Oral	Rat/Male-Female	LOAEL; 600 ppm Not specified
	Inhalation	Rat	700 mg/m ³ air Not specified
Genetic			Negative
Developmental toxicity	Oral	Mouse	NOAEL; 50 mg/kg bw/day Not specified

12 ECOLOGICAL INFORMATION

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PNEC Değerleri	N,N-diethylhydroxylamine	2-aminoethanol	Morpholine	Cyclohexylamine
Fresh water	8.2 µg/l 82 µg/l (intermittent releases)	0.085 mg/l 0.028 mg/l (intermittent releases)	0.1 mg/l 0.28 mg/l (intermittent releases)	0.016 mg/l 0.19mg/l (intermittent releases)
Marine	0.82 µg/l	0.009 mg/l	0.01 mg/l	0.002 mg/l
STP	10 mg/l	100 mg/l	10 mg/l	22.52 mg/l
Sediment (Fresh water)	0.065 mg/kg sediment dw	0.434 mg/kg sediment dw	1.49 mg/kg sediment dw	4.1 mg/kg sediment dw
Sediment (Marine)	0.007 mg/kg sediment dw	0.043 mg/kg sediment dw	0.149 mg/kg sediment dw	0.41 mg/kg sediment dw
Soil	6.4 mg/kg soil dw	0.037 mg/kg soil dw	0.239 mg/kg soil dw	0.805 mg/kg soil dw
Predators	-	-	-	-

13 DISPOSAL CONSIDERATIONS

Via authorized contractor. If this product becomes a waste, the final user must define and assign the appropriate European Waste Catalogue code.

NATIONAL REGULATIONS UK

In accordance with the Environmental Protection (Duty of Care) Regulations 1991. Special Waste Regulations 1996 apply.

NATIONAL REGULATIONS AUSTRIA

Waste Code: 55352

14 TRANSPORT INFORMATION

UN NUMBER:

ADR/RID: 2920

IMDG: 2920

IATA: 2920

UN PROPER SHIPPING NAME

ADR/RID: CORROSIVE LIQUID, FLAMMABLE, N.O.S., content: Cyclohexylamine, N,N-diethylhydroxylamine

IMDG: CORROSIVE LIQUID, FLAMMABLE, N.O.S., content: Cyclohexylamine, N,N-diethylhydroxylamine

IATA: CORROSIVE LIQUID, FLAMMABLE, N.O.S., content: Cyclohexylamine, N,N-diethylhydroxylamine

TRANSPORT HAZARD CLASS(ES)

ADR/RID: 8

IMDG: 8

IATA: 8



LABEL: 8+3

PACKAGING GROUP

ADR/RID: II

IMDG: II

IATA: II

ENVIRONMENTAL HAZARDS

ADR/RID: no

IMDG Marine pollutant: no

IATA: no

SPECIAL PRECAUTIONS FOR USER: No data available.

15 REGULATORY INFORMATION

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THIS SAFETY DATASHEET COMPLIES WITH THE REQUIREMENTS OF
REGULATION (EC) NO. 1907/2006.

SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE: No data
available.

CHEMICAL SAFETY ASSESSMENT: For this product a chemical safety assessment was not carried out.

16 OTHER INFORMATION

This product material safety data sheet provides health and safety information. The product is to be used in applications consistent with our product literature. Individuals handling this product should be informed of the recommended safety precautions and should have access to this information. For any other uses, exposures should be evaluated so that appropriate handling practices and training programs can be established to insure safe workplace operations. Please consult your local sales representative for any further information.

EMERGENCY TELEPHONE NUMBER(S): 0 850 522 71 04

SDS Authorized Person: ŞEVVAL GÖKÇE DENKÇİ

Certificate Validity Date: 31.12.2023

Certificate No: GBF01.60.02