



SAFETY DATA SHEET (SDS)

Prepared in accordance with the Globally Harmonized System of Classification and Labelling of Chemicals (GHS).

SECTION 1: IDENTIFICATION OF THE SUBSTANCE AND COMPANY

1.1 PRODUCT IDENTIFIER

Product Name: Isonaline 70

Substance Name: Methyl Ionone

CAS Number: 1335-46-2

Molecular Formula: C₁₄H₂₂O

Product Number: 5005817

Substance Type: Multi-Constituent Substance; Mixture of Isomers

1.2 RELEVANT IDENTIFIED USES AND RESTRICTIONS

Recommended Use: Ingredient for fragrances and perfumery applications.

Restrictions on Use: For professional and manufacturing use only.

1.3 SUPPLIER DETAILS

Aromology

G05 Al Ghazal Building

Nadd Al Hamar

Dubai, United Arab Emirates

Website: www.aromology.com

Email: info@aromology.com

Telephone: +971 505197601

SECTION 2: HAZARD IDENTIFICATION

2.1 CLASSIFICATION OF THE SUBSTANCE

Classification according to the manufacturer's GHS SDS:

- Skin Irritation: Category 2
- Eye Irritation: Category 2A

2.2 LABEL ELEMENTS

Signal Word: Warning

Hazard Pictogram: Exclamation Mark



HAZARD STATEMENTS

H315: Causes skin irritation.

H319: Causes serious eye irritation.

PRECAUTIONARY STATEMENTS

P264: Wash skin thoroughly after handling.

P280: Wear protective gloves, eye protection and face protection.

P302 + P352: IF ON SKIN: Wash with plenty of soap and water.

P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

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

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

P362: Take off contaminated clothing and wash it before reuse.

2.3 POTENTIAL HEALTH EFFECTS

Primary Route of Entry: Skin absorption

Skin: May cause skin irritation.

Eyes: May cause eye irritation.

Symptoms of Overexposure: No specific symptoms known.

Aggravated Medical Conditions: None known.

2.4 CARCINOGENICITY

No component present at a concentration of 0.1% or greater is identified as a probable, possible or confirmed human carcinogen by IARC, OSHA or the US National Toxicology Program.

2.5 OTHER HAZARDS

No additional hazards are known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 SUBSTANCE INFORMATION

Common Name: Methyl Ionone

Description: Multi-constituent substance consisting of a mixture of isomers

CAS Number: 1335-46-2

Molecular Formula: C₁₄H₂₂O

3.2 COMPONENTS

Chemical Component	CAS Number	Concentration
3-Methyl-4-(2,6,6-trimethyl-2-cyclohexen-1-yl)-3-buten-2-one	127-51-5	50–70%
1-(2,6,6-Trimethyl-2-cyclohexen-1-yl)pent-1-en-3-one	7779-30-8	20–30%



Chemical Component	CAS Number	Concentration
3-Methyl-4-(2,6,6-trimethyl-1-cyclohexen-1-yl)-3-buten-2-one	79-89-0	10–20%
1-(2,6,6-Trimethyl-1-cyclohexen-1-yl)pent-1-en-3-one	127-43-5	5–10%

The stated concentration ranges relate to the manufacturer's multi-constituent isomeric composition.

SECTION 4: FIRST-AID MEASURES

4.1 DESCRIPTION OF FIRST-AID MEASURES

General Advice:

Move the affected person away from the hazardous area. Provide this Safety Data Sheet to the attending medical professional.

Inhalation:

Move the affected person to fresh air. Consult a physician following significant exposure or if symptoms develop.

Skin Contact:

Immediately remove contaminated clothing and shoes. Wash the affected area with soap and plenty of water. Seek medical attention if symptoms persist. Wash contaminated clothing before reuse.

Eye Contact:

Immediately rinse the eyes with plenty of water. Remove contact lenses if present and easy to do. Protect the unaffected eye and keep the affected eye open while rinsing. Consult a specialist if irritation persists.

Ingestion:

Rinse the mouth with water and drink plenty of water afterwards. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. Obtain medical attention.

4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS

No specific symptoms are known.

4.3 MEDICAL ATTENTION AND SPECIAL TREATMENT

Treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1 FLAMMABLE PROPERTIES



Flash Point: 126°C / 259°F at 1,013 hPa
Method: ISO 2719, closed cup
Ignition Temperature: 254°C at 1,013 hPa
Lower Explosion Limit: Not determined
Upper Explosion Limit: Not determined

The product is not classified as pyrophoric and does not emit flammable gases in contact with water. It may burn under fire conditions.

5.2 EXTINGUISHING MEDIA

Suitable Extinguishing Media:

- Dry chemical powder
- Alcohol-resistant foam

Unsuitable Extinguishing Media:

High-volume water jet.

5.3 SPECIFIC HAZARDS

Do not allow firefighting runoff to enter drains, sewers or watercourses.

5.4 ADVICE FOR FIREFIGHTERS

Wear a self-contained breathing apparatus and appropriate protective firefighting equipment.

Collect contaminated firefighting water separately. Fire residues and contaminated water must be disposed of in accordance with applicable regulations.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS

- Wear appropriate personal protective equipment.
- Ensure adequate ventilation.
- Avoid contact with the skin and eyes.
- Avoid breathing vapours, mist, spray or aerosols.
- Keep unnecessary personnel away from the affected area.

6.2 ENVIRONMENTAL PRECAUTIONS

Do not flush into surface water or sanitary sewer systems. Prevent further leakage or spillage where this can be done safely.

If the product contaminates rivers, lakes, drains or sewers, notify the appropriate authorities.



6.3 CONTAINMENT AND CLEANING METHODS

Absorb the spill with an inert material such as:

- Sand
- Silica gel
- Acid binder
- Universal binder
- Sawdust

Collect the absorbed material and place it into suitable, closed and labelled containers for disposal.

SECTION 7: HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING

- Avoid contact with the skin and eyes.
- Avoid breathing vapours, mist or aerosols.
- Wear the personal protective equipment specified in Section 8.
- Do not eat, drink or smoke in areas where the product is handled.
- Wash hands thoroughly after handling.
- Dispose of contaminated rinsing water in accordance with applicable regulations.
- Take appropriate precautions against static-electricity discharge.

7.2 CONDITIONS FOR SAFE STORAGE

- Keep under inert gas.
 - Protect from light and humidity.
 - Keep the container tightly closed and dry.
 - Carefully reseal opened containers.
 - Store containers upright to prevent leakage.
 - Store below 25 °C.
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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 CONTROL PARAMETERS

The product does not contain substances with established occupational exposure-limit values in the manufacturer's source SDS.

8.2 PERSONAL PROTECTIVE EQUIPMENT

**Respiratory Protection:**

Where vapours form, use a respirator fitted with an approved filter. For exposure to mist, spray or aerosols, wear suitable respiratory protection and protective clothing.

Hand Protection:

Wear suitable chemical-resistant gloves. Examples include nitrile rubber or butyl rubber.

Glove selection should consider the product's hazards and the specific conditions of use.

Eye Protection:

Wear safety glasses with side shields.

Skin and Body Protection:

Select protective clothing according to the quantity and concentration of the material handled.

Hygiene Measures:

Handle in accordance with good industrial hygiene and safety practices. Wash hands before breaks and at the end of the working day.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**9.1 BASIC PHYSICAL AND CHEMICAL PROPERTIES**

Property	Information
Physical State	Oily liquid
Colour	Pale yellow
Odour	Characteristic
Odour Threshold	Not available
pH	Not available
Melting Point/Range	Below -20 °C
Boiling Point	270.6 °C at 1,013 hPa
Flash Point	126 °C at 1,013 hPa, closed cup
Flash-Point Method	ISO 2719
Evaporation Rate	Not determined
Lower Explosion Limit	Not determined
Upper Explosion Limit	Not determined
Vapour Pressure	0.0022 hPa at 20 °C
Relative Vapour Density	Not determined
Density	0.93 g/cm ³ at 20 °C
Water Solubility	21-44 mg/L at 20 °C
Solubility in Organic Solvents	Soluble in various organic solvents
Partition Coefficient	Log Pow 4.5-5.0 at 23 °C



Property	Information
Ignition Temperature	254 °C at 1,013 hPa
Thermal Decomposition	Not relevant
Dynamic Viscosity	13.1 mPa·s at 20 °C
Explosive Properties	Not explosive
Oxidising Properties	Not oxidising
Refractive Index at 20 °C	1.498–1.502

SECTION 10: STABILITY AND REACTIVITY

10.1 REACTIVITY

No special reactivity hazards are known.

10.2 CHEMICAL STABILITY

Stable under recommended storage conditions.

10.3 POSSIBILITY OF HAZARDOUS REACTIONS

Possible incompatibility with the materials listed in Section 10.5.

10.4 CONDITIONS TO AVOID

Avoid heat.

10.5 INCOMPATIBLE MATERIALS

- Strong acids
- Strong bases
- Strong oxidising agents

10.6 HAZARDOUS DECOMPOSITION PRODUCTS

No hazardous decomposition is expected when the product is stored and used as directed.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 ACUTE TOXICITY

Acute Oral Toxicity: LD50, rat: greater than 5,000 mg/kg

Acute Dermal Toxicity: LD50, rabbit, male and female: greater than 5,000 mg/kg

11.2 SKIN CORROSION/IRRITATION

Moderately irritating to rabbit skin. The product is classified as Skin Irritation Category 2.

11.3 SERIOUS EYE DAMAGE/EYE IRRITATION

Irritating to rabbit eyes. The product is classified as Eye Irritation Category 2A.



11.4 RESPIRATORY OR SKIN SENSITISATION

Did not cause sensitisation in the guinea-pig maximisation test. No photoallergenic skin reaction was observed in guinea pigs.

11.5 GERM CELL MUTAGENICITY

Not mutagenic in the Ames test and not genotoxic in an in-vivo mouse micronucleus test.

11.6 CARCINOGENICITY

No indication of carcinogenicity is known.

11.7 REPRODUCTIVE TOXICITY

No indication of adverse effects on fertility or teratogenicity is known.

11.8 SPECIFIC TARGET ORGAN TOXICITY – SINGLE EXPOSURE

Not classified as a specific target-organ toxicant following single exposure.

11.9 SPECIFIC TARGET ORGAN TOXICITY – REPEATED EXPOSURE

NOAEL, Oral, Male Rat: 30 mg/kg body weight/day

LOAEL, Oral, Male Rat: 500 mg/kg body weight/day

The data are from a 90-day sub-chronic toxicity study conducted according to OECD Test Guideline 408 and refer to the principal component.

11.10 ASPIRATION HAZARD

Not classified for aspiration toxicity.

11.11 OTHER INFORMATION

The product passes into and partly through the skin of rats and pigs. Vapours may cause respiratory-tract irritation.

SECTION 12: ECOLOGICAL INFORMATION

12.1 ECOTOXICITY

Test Organism	Endpoint	Result	Method
<i>Danio rerio</i> , Zebrafish	LC50, 96 hours	Approximately 2.3 mg/L	OECD 203
<i>Daphnia magna</i> , Water Flea	EC50, 48 hours	3.7 mg/L	OECD 202
<i>Desmodesmus subspicatus</i> , Green Algae	EC50, 72 hours	Greater than 9.42 mg/L	OECD 201
Activated Sludge	EC50, 1 hour	Greater than 1,000 mg/L	OECD 209

The product is toxic to aquatic organisms and may cause long-lasting adverse effects in the aquatic environment.

12.2 PERSISTENCE AND DEGRADABILITY



Biodegradability: Readily biodegradable
Result: 76% after 28 days
Method: OECD Test Guideline 301F

12.3 BIOACCUMULATIVE POTENTIAL

Bioconcentration Factor: 586, calculated value
Partition Coefficient: Log Pow 4.5–5.0 at 23 °C

The product may accumulate in organisms.

12.4 MOBILITY IN SOIL

Soil Adsorption: Log Koc 3.0, calculated value.

12.5 PBT AND vPvB ASSESSMENT

The substance does not fulfil the criteria for classification as PBT or vPvB.

12.6 OTHER ADVERSE EFFECTS

The product does not contain and was not manufactured using Class I or Class II ozone-depleting substances as defined by the US Clean Air Act.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 WASTE FROM RESIDUES

The user must determine whether generated waste displays hazardous characteristics under applicable national and local legislation.

- Avoid discharge into the environment.
- Do not contaminate ponds, waterways or ditches.
- Do not dispose of waste into sewers.
- Send surplus and non-recyclable material to a licensed waste-disposal company.

13.2 CONTAMINATED PACKAGING

Dispose of contaminated packaging as unused product. Do not reuse empty containers.

SECTION 14: TRANSPORT INFORMATION

14.1 AIR TRANSPORT – IATA-DGR

UN Number: UN 3082
Proper Shipping Name: Environmentally Hazardous Substance, Liquid, N.O.S.



Technical Name: Contains methyl ionone isomers
Transport Hazard Class: 9
Packing Group: III
Label: Miscellaneous Dangerous Goods
Passenger Aircraft Packing Instruction: 964
Cargo Aircraft Packing Instruction: 964

14.2 SEA TRANSPORT – IMDG

UN Number: UN 3082
Proper Shipping Name: Environmentally Hazardous Substance, Liquid, N.O.S.
Technical Name: Contains methyl ionone isomers
Transport Hazard Class: 9
Packing Group: III
Label: 9
EmS Code: F-A, S-F
Marine Pollutant: Yes

14.3 ROAD TRANSPORT – 49 CFR

UN Number: UN 3082
Proper Shipping Name: Environmentally Hazardous Substance, Liquid, N.O.S.
Technical Name: Contains methyl ionone isomers
Transport Hazard Class: 9
Packing Group: III
Label: Class 9
ERG Code: 171
Marine Pollutant: Yes

14.4 TRANSPORT IN BULK

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code is not applicable to the product as supplied.

SECTION 15: REGULATORY INFORMATION

15.1 US FEDERAL REGULATIONS

CERCLA Reportable Quantity:

The product does not contain components with an assigned CERCLA reportable quantity.

SARA 304:

The product does not contain substances with a Section 304 Extremely Hazardous Substance reportable quantity.

SARA 311/312:

Acute health hazard.

**SARA 302:**

No components are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313:

The product does not contain components exceeding the applicable reporting thresholds.

15.2 CLEAN AIR ACT

The product does not contain:

- Hazardous air pollutants under Section 112
- Substances listed for accidental-release prevention under Section 112(r)
- SOCM intermediate or final volatile organic compounds listed under Section 111

15.3 CLEAN WATER ACT

The product does not contain:

- Hazardous substances listed under Section 311
- Hazardous chemicals listed under Section 311
- Toxic pollutants listed under Section 307

15.4 STATE RIGHT-TO-KNOW INFORMATION

No components are subject to the Massachusetts Right-to-Know Act according to the source SDS.

Components may be subject to Pennsylvania and New Jersey Right-to-Know requirements.

15.5 CHEMICAL INVENTORY STATUS

The components are listed on the TSCA Inventory.

SECTION 16: OTHER INFORMATION**16.1 HAZARD RATINGS****NFPA:**

- Health: 2
- Flammability: 1
- Instability: 0

HMIS III:

- Health: 3
- Flammability: 1
- Physical Hazard: 0



16.2 DOCUMENT INFORMATION

Source Revision Date: 23 November 2015

Source Print Date: 02 March 2018

Source Version: 3.1

Language: English

16.3 ABBREVIATIONS

BCF: Bioconcentration Factor

CAS: Chemical Abstracts Service

CERCLA: Comprehensive Environmental Response, Compensation and Liability Act

EC50: Median Effective Concentration

ERG: Emergency Response Guidebook

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

HMIS: Hazardous Materials Identification System

IARC: International Agency for Research on Cancer

IATA: International Air Transport Association

IMDG: International Maritime Dangerous Goods Code

LC50: Median Lethal Concentration

LD50: Median Lethal Dose

LOAEL: Lowest Observed Adverse Effect Level

NFPA: National Fire Protection Association

NOAEL: No Observed Adverse Effect Level

NTP: National Toxicology Program

OSHA: Occupational Safety and Health Administration

PBT: Persistent, Bioaccumulative and Toxic

SARA: Superfund Amendments and Reauthorization Act

TSCA: Toxic Substances Control Act

UN: United Nations

vPvB: Very Persistent and Very Bioaccumulative

16.4 DISCLAIMER

The information contained in this Safety Data Sheet is based on the manufacturer's knowledge and information available on the source revision date. It is intended solely as guidance for safe handling, use, processing, storage, transportation, disposal and release.

The information does not constitute a warranty or quality specification. It applies only to the specifically identified material and may not remain valid when the product is combined with other materials or used in another process.

Users remain responsible for determining the product's suitability for their intended application and for complying with all applicable regulations.

Authorised by:

Fozia Khot

Director