



SAFETY DATA SHEET (SDS)

Prepared in accordance with the Globally Harmonized System (GHS) and Regulation (EC) No. 1907/2006 (REACH, as amended)

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND COMPANY

1.1 Product Identifier

Parameter	Details
Product Name	Natural Pyrazines 10
Chemical Name	2-Ethyl-3,6-dimethylpyrazine
Alternative Names	3,6-Cocoa Pyrazine; 2,5-Dimethyl-3-ethylpyrazine
CAS Number	13360-65-1
EC Number	236-417-1
Molecular Formula	C ₈ H ₁₂ N ₂
Molecular Weight	136.20 g/mol
Product Form	Approximately 10% preparation in a perfumery carrier
Product Type	Natural or naturally derived aroma ingredient preparation
Grade	Professional perfumery grade

1.2 Recommended Uses

- Fine-fragrance formulation
- Roasted cocoa accords
- Chocolate accords
- Coffee and toasted-nut accords
- Tobacco compositions
- Gourmand fragrances
- Woody and amber accords
- Incense and home fragrance
- Cosmetic fragrance compounds

1.3 Uses Advised Against

- Internal consumption
- Direct undiluted skin application
- Food or flavour use unless separately certified
- Pharmaceutical or therapeutic use
- Use by children
- Use without an appropriate finished-product safety assessment
- Use contrary to applicable IFRA Standards



1.4 Supplier

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SECTION 2: HAZARDS IDENTIFICATION

2.1 Representative Classification

The neat substance CAS 13360-65-1 has been classified by commercial suppliers as harmful if swallowed and as a combustible liquid. The final classification of this 10% preparation depends on the carrier and the exact concentration.

A conservative representative classification for the preparation is:

Hazard Class	Classification
Flammable/Combustible Liquid	Category dependent on carrier and flash point
Acute Toxicity, Oral	Category 4 may apply
Eye Irritation	Category 2
Skin Irritation	Category 2 may apply

2.2 Label Elements

Signal Word

Warning

Representative Hazard Statements

- **H227:** Combustible liquid.
- **H302:** Harmful if swallowed.
- **H315:** Causes skin irritation.
- **H319:** Causes serious eye irritation.

Precautionary Statements

- **P210:** Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.
- **P264:** Wash thoroughly after handling.
- **P270:** Do not eat, drink or smoke when using this product.
- **P280:** Wear protective gloves and eye protection.



- **P301+P312:** IF SWALLOWED: Call a poison centre or doctor if you feel unwell.
- **P330:** Rinse mouth.
- **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 where easy to do.
- **P337+P313:** If eye irritation persists: Get medical advice.
- **P403+P235:** Store in a well-ventilated place. Keep cool.
- **P501:** Dispose of contents and container according to applicable regulations.

2.3 Other Hazards

- Extremely powerful odour even at low concentration.
- Vapours may cause headache, nausea or discomfort in poorly ventilated areas.
- Spilled liquid may create a slipping hazard.
- Hazard classification may change depending on the carrier solvent.
- Not intended for internal consumption.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Mixture

Component	CAS No.	EC No.	Representative Concentration
2-Ethyl-3,6-dimethylpyrazine	13360-65-1	236-417-1	Approximately 10%
Perfumery Carrier/Diluent	To be declared	To be declared	Approximately 90%

Possible Carriers

The preparation may be diluted in one of the following, subject to supplier confirmation:

- Dipropylene glycol
- Triethyl citrate
- Ethanol
- Benzyl benzoate
- Isopropyl myristate
- Another suitable fragrance carrier

The exact carrier must be stated before formal issue.

3.2 Substance Identity

CAS 13360-65-1 is identified as 2-ethyl-3,6-dimethylpyrazine and is used as a flavour and fragrance material with cocoa, roasted and nutty characteristics.

SECTION 4: FIRST-AID MEASURES

4.1 Inhalation



- Move the affected person to fresh air.
- Keep at rest in a comfortable position.
- Obtain medical advice if coughing, dizziness, nausea or respiratory discomfort persists.
- If breathing stops, trained personnel should provide artificial respiration.

4.2 Skin Contact

- Remove contaminated clothing.
- Wash the affected area thoroughly with soap and water.
- Do not use solvents to clean the skin.
- Seek medical advice if irritation develops.
- Wash contaminated clothing before reuse.

4.3 Eye Contact

- Rinse cautiously with clean water for at least 15 minutes.
- Remove contact lenses where present and easy to do.
- Continue rinsing.
- Obtain medical attention if irritation persists.

4.4 Ingestion

- Rinse the mouth.
- Do not induce vomiting.
- Never give anything by mouth to an unconscious person.
- Contact a poison centre or physician promptly.

4.5 Most Important Symptoms

- Eye redness, pain or watering
- Skin irritation
- Nausea or gastrointestinal discomfort
- Headache or dizziness following excessive vapour exposure
- Harmful effects following ingestion

4.6 Medical Treatment

Treat symptomatically. Show this MSDS to attending medical personnel.

SECTION 5: FIRE-FIGHTING MEASURES

5.1 Suitable Extinguishing Media

- Carbon dioxide
- Dry chemical powder



- Alcohol-resistant foam
- Water fog

5.2 Unsuitable Extinguishing Media

Do not use a high-pressure water jet, as this may spread burning material.

5.3 Specific Hazards

Heating or combustion may produce:

- Carbon monoxide
- Carbon dioxide
- Nitrogen oxides
- Irritating smoke
- Toxic or irritating organic vapours

5.4 Firefighter Protection

Wear:

- Self-contained breathing apparatus
- Full protective clothing
- Chemical-resistant gloves

Cool exposed containers using water spray.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions

- Restrict access to the affected area.
- Eliminate flames, sparks and ignition sources.
- Provide adequate ventilation.
- Avoid breathing vapours.
- Avoid skin and eye contact.
- Wear protective gloves and safety goggles.

6.2 Environmental Precautions

- Prevent entry into drains, sewers, soil and waterways.
- Contain large spills.
- Notify the relevant authority if significant environmental contamination occurs.

6.3 Cleaning Methods



- Absorb with sand, earth, vermiculite or another inert absorbent.
- Transfer into a suitable labelled waste container.
- Clean the affected area with detergent and water.
- Do not wash uncontrolled quantities into drains.
- Dispose of through an authorised waste contractor.

SECTION 7: HANDLING AND STORAGE

7.1 Safe Handling

- Handle in a well-ventilated area.
- Avoid inhalation of concentrated vapours.
- Avoid skin and eye contact.
- Keep away from flames, sparks and hot surfaces.
- Do not eat, drink or smoke while handling.
- Wear suitable personal protective equipment.
- Use clean, dry dispensing tools.
- Keep containers closed when not in use.
- Avoid repeated exposure to air.

7.2 Storage Conditions

Store:

- In the original tightly sealed container
- At approximately **15–25°C**
- In a cool, dry and well-ventilated area
- Away from direct sunlight
- Away from heat and ignition sources
- Away from strong oxidising agents
- Away from food and beverages
- Out of reach of children

7.3 Specific End Use

Professional fragrance formulation at low dosage, subject to IFRA assessment and finished-product safety evaluation.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Occupational Exposure Limits

No occupational exposure limit has been established for the complete preparation.

Exposure limits may apply to the carrier solvent.



8.2 Engineering Controls

- Provide adequate general ventilation.
- Use local exhaust ventilation during bulk handling.
- Provide access to an eyewash station.
- Avoid aerosol and mist formation.

8.3 Personal Protective Equipment

Eye Protection

Chemical safety goggles.

Hand Protection

Nitrile or butyl-rubber gloves.

Skin Protection

Laboratory coat, protective apron and closed footwear.

Respiratory Protection

Normally not required under adequate ventilation.

Use an approved organic-vapour respirator if ventilation is inadequate or vapour concentrations are elevated.

8.4 Hygiene Measures

- Wash hands thoroughly after handling.
- Remove contaminated clothing promptly.
- Do not eat or drink in the working area.
- Avoid direct skin application.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Property	Representative Information
Physical State	Liquid
Appearance	Clear liquid
Colour	Colourless to pale yellow or amber
Odour	Powerful roasted cocoa, dark chocolate, coffee, nutty and toasted
Odour Threshold	Very low
pH	Not applicable
Melting/Freezing Point	Not determined for preparation



Boiling Point	Not determined for preparation
Flash Point	Carrier dependent; batch testing required
Flammability	Combustible depending on carrier
Vapour Pressure	Low to moderate
Relative Density at 20°C	Carrier dependent
Refractive Index at 20°C	Carrier dependent
Water Solubility	Slightly soluble to insoluble
Alcohol Solubility	Generally soluble
Partition Coefficient	Not determined for preparation
Auto-Ignition Temperature	Not determined
Decomposition Temperature	Not determined
Viscosity	Low to moderate
Explosive Properties	Not expected to be explosive
Oxidising Properties	Not expected to be oxidising

The neat substance has a molecular formula of $C_8H_{12}N_2$ and molecular weight of approximately 136.20 g/mol.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

No hazardous reaction is expected under normal handling conditions.

10.2 Chemical Stability

Stable when stored in tightly sealed containers under recommended conditions.

10.3 Hazardous Reactions

Hazardous polymerisation is not expected.

May react with strong oxidising agents.

10.4 Conditions to Avoid

- Excessive heat
- Open flames and sparks
- Direct sunlight
- Prolonged air exposure
- Moisture contamination
- Repeated heating



10.5 Incompatible Materials

- Strong oxidising agents
- Strong acids
- Strong alkalis
- Reactive chemicals

10.6 Hazardous Decomposition Products

- Carbon monoxide
- Carbon dioxide
- Nitrogen oxides
- Irritating organic vapours

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Acute Toxicity

The neat material has been classified by a commercial SDS as harmful if swallowed, Acute Toxicity Oral Category 4.

The toxicity of the 10% preparation depends on the exact concentration and carrier.

11.2 Skin Corrosion/Irritation

May cause skin irritation, particularly after prolonged or repeated contact.

11.3 Eye Damage/Irritation

May cause serious eye irritation.

11.4 Respiratory or Skin Sensitisation

No complete-mixture sensitisation data are available.

Persons with fragrance sensitivities should minimise exposure.

11.5 Germ-Cell Mutagenicity

No classification assigned based on currently available representative information.

11.6 Carcinogenicity

No classification assigned for the preparation without formulation-specific data.



11.7 Reproductive Toxicity

No classification assigned for the preparation without formulation-specific data.

11.8 Specific Target Organ Toxicity

High vapour exposure may cause:

- Headache
- Nausea
- Dizziness
- Respiratory discomfort

11.9 Aspiration Hazard

Not determined.

Do not induce vomiting following ingestion.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Ecotoxicity

No complete-mixture aquatic toxicity data are available.

Avoid uncontrolled release into the environment.

12.2 Persistence and Degradability

Complete preparation data are unavailable.

The carrier and pyrazine component may have different biodegradation profiles.

12.3 Bioaccumulative Potential

Not determined for the preparation.

12.4 Mobility in Soil

Expected to have limited to moderate mobility depending on the carrier.

12.5 PBT and vPvB Assessment

The preparation has not been fully assessed.

12.6 Other Adverse Effects



Avoid discharge into drains, soil and waterways.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Product Disposal

Dispose of through an authorised chemical-waste contractor.

Do not discharge into:

- Drains
- Sewers
- Soil
- Surface water
- Groundwater

13.2 Packaging Disposal

- Empty containers may retain hazardous residue.
- Do not reuse uncleaned containers.
- Dispose of or recycle in accordance with local requirements.
- Do not cut, weld or burn contaminated containers.

SECTION 14: TRANSPORT INFORMATION

Transport classification depends primarily on:

- Actual carrier solvent
- Flash point
- Concentration
- Package size
- Environmental classification

Transport Parameter	Representative Information
UN Number	Not assigned pending carrier and flash-point confirmation
Proper Shipping Name	Not determined
Transport Hazard Class	Not determined
Packing Group	Not determined
Environmental Hazard	Not established
Marine Pollutant	Not established
Special Precautions	Keep sealed, upright and protected from heat
Bulk Transport	Not intended without specialist assessment



If diluted in ethanol or another flammable solvent, the transport classification of that solvent may apply.

SECTION 15: REGULATORY INFORMATION

The product should be assessed under applicable legislation, including:

- Regulation (EC) No. 1907/2006 concerning REACH
- Regulation (EC) No. 1272/2008 concerning classification, labelling and packaging
- Regulation (EU) 2020/878 concerning safety-data-sheet requirements
- Regulation (EC) No. 1223/2009 on cosmetic products
- Applicable IFRA Standards
- Applicable UAE chemical and occupational-safety requirements
- Applicable transport legislation

Substance Identification

Regulatory Identifier	Details
CAS Number	13360-65-1
EC Number	236-417-1
Chemical Name	2-Ethyl-3,6-dimethylpyrazine
Alternative Register Name	2,5-Dimethyl-3-ethylpyrazine

The substance is recognised as a flavour and fragrance ingredient, but food-use status does not automatically establish safety or permission for unrestricted cosmetic or perfumery use.

SECTION 16: OTHER INFORMATION

16.1 Recommended Shelf Life

24 months from the manufacturing date when stored unopened under recommended conditions.

16.2 Olfactive Profile

Natural Pyrazines 10 – Roasted Cocoa provides:

- Roasted cocoa
- Dark chocolate
- Toasted coffee
- Nutty facets
- Burnt sugar
- Toasted grain
- Dry woody warmth



- Tobacco-like depth

The material is extremely powerful and is normally evaluated at low concentration.

16.3 Recommended Applications

- Gourmand fragrances
- Chocolate accords
- Cocoa accords
- Coffee accords
- Hazelnut and praline accords
- Tobacco fragrances
- Leather compositions
- Amber and woody fragrances
- Incense and home fragrance

16.4 Hazard Statement Text

- **H227:** Combustible liquid.
- **H302:** Harmful if swallowed.
- **H315:** Causes skin irritation.
- **H319:** Causes serious eye irritation.

PRODUCT IDENTITY NOTICE

This MSDS is prepared on the assumption that:

- The principal aroma chemical is **2-ethyl-3,6-dimethylpyrazine**.
- The principal substance CAS number is **13360-65-1**.
- The product is supplied at approximately **10% concentration**.
- The remaining approximately 90% consists of a perfumery carrier.

Before formal issue, confirm:

- Actual percentage of CAS 13360-65-1
- Exact carrier solvent
- Carrier CAS and EC numbers
- Batch flash point
- Density and refractive index
- Final GHS/CLP classification
- Transport status
- Natural-origin certification, where claimed



DISCLAIMER

This Material Safety Data Sheet is a representative professional template prepared for **Natural Pyrazines 10 – Roasted Cocoa, CAS 13360-65-1**.

It is not evidence that a specific batch has been physically or chemically tested by Aromology Trading LLC.

Before commercial or regulatory issue, this MSDS must be verified against:

- The original manufacturer's SDS
- The exact formulation
- Carrier identity and concentration
- Batch-specific Certificate of Analysis
- Flash-point test
- Toxicological data
- IFRA documentation
- Current transport regulations

The classification presented is conservative and may change depending on the actual dilution and carrier. The manufacturer, distributor and finished-product producer remain responsible for correct classification, safe handling, workplace risk assessment, transport compliance, IFRA conformity and finished-product safety.

Authorised by

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Aromology Trading LLC