



SAFETY DATA SHEET ISOVALERIC ACID

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

PRODUCT NAME	ISOVALERIC ACID
CAS-No.	503-74-2
EC No.	207-975-3
PRODUCT NO.	I1950
SUPPLIER	Frutarom (UK) Ltd Zinc Works Road North Gare Seaton Carew Hartlepool TS25 2DT +44 1429 863555 +44 1429 890318 dsymmonds@frutarom.com
FEMA No	3102

2 HAZARDS IDENTIFICATION

CLASSIFICATION (67/548) T;R24. Xn;R20/22. C;R34.

CLASSIFICATION (EC 1272/2008)

Physical	Not classified.
Health	Acute Tox. 4 - H302; Acute Tox. 3 - H311, H312; Acute Tox. 4 - H311, H312; Acute Tox. 4 - H332; Skin Corr. 1B - H314
Environmental	Not classified.

LABEL IN ACCORDANCE WITH (EC) NO. 1272/2008



SIGNAL WORD Danger

HAZARD STATEMENTS

H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H332	Harmful if inhaled.

PRECAUTIONARY STATEMENTS

P280	Wear protective gloves/protective clothing/eye protection/face protection.
P305/351/338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

SUPPLEMENTARY PRECAUTIONARY STATEMENTS

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash ... thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.

ISOVALERIC ACID

P271	Use only outdoors or in a well-ventilated area.
P301/312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P301/330/331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P302/352	IF ON SKIN: Wash with plenty of soap and water.
P303/361/353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304/340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P310	Immediately call a POISON CENTER or doctor/physician.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P321	Specific treatment (see ... on this label).
P322	Specific measures (see ... on this label).
P330	Rinse mouth.
P361	Remove/Take off immediately all contaminated clothing.
P363	Wash contaminated clothing before reuse.
P405	Store locked up.
P501	Dispose of contents/container to ...

3 COMPOSITION/INFORMATION ON INGREDIENTS

EC No.	207-975-3
GROSS FORMULA	C5 H10 O2
CAS-No.	503-74-2

4 FIRST-AID MEASURES**INHALATION**

Move the exposed person to fresh air at once. Get medical attention. Provide rest, warmth and fresh air. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen.

INGESTION

DO NOT INDUCE VOMITING! NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! Remove victim immediately from source of exposure. Get medical attention immediately! Provide rest, warmth and fresh air.

SKIN CONTACT

Remove affected person from source of contamination. Remove contaminated clothing. Wash the skin immediately with soap and water. Get medical attention promptly if symptoms occur after washing.

EYE CONTACT

Remove victim immediately from source of exposure. Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes and get medical attention.

5 FIRE-FIGHTING MEASURES**EXTINGUISHING MEDIA**

Use fire-extinguishing media appropriate for surrounding materials.

6 ACCIDENTAL RELEASE MEASURES**PERSONAL PRECAUTIONS**

Use protective gloves, goggles and suitable protective clothing. Avoid inhalation of vapours and contact with skin and eyes.

SPILL CLEAN UP METHODS

Wear necessary protective equipment. Absorb in vermiculite, dry sand or earth and place into containers. Do not contaminate water sources or sewer.

7 HANDLING AND STORAGE**USAGE PRECAUTIONS**

Avoid spilling, skin and eye contact. Ventilate well, avoid breathing vapours. Use approved respirator if air contamination is above accepted level.

STORAGE PRECAUTIONS

Store in tightly closed original container in a dry, cool and well-ventilated place. Keep in original container.

ISOVALERIC ACID

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

PROTECTIVE EQUIPMENT



ENGINEERING MEASURES

Provide adequate general and local exhaust ventilation.

RESPIRATORY EQUIPMENT

No specific recommendation made, but respiratory protection must be used if the general level exceeds the recommended occupational exposure limit.

HAND PROTECTION

Use protective gloves.

EYE PROTECTION

Wear approved safety goggles.

OTHER PROTECTION

Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact.

HYGIENE MEASURES

DO NOT SMOKE IN WORK AREA! Wash at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. Wash promptly with soap & water if skin becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke.

9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Liquid		
COLOUR	Colourless		
ODOUR	Sharp		
SOLUBILITY	Insoluble in water Soluble in: Organic solvents		
MOL. WEIGHT	102.13	BOILING POINT (°C)	175 - 177 atm
RELATIVE DENSITY	0.923 - 0.927 20	VAPOUR DENSITY (air=1)	3.5
FLASH POINT (°C)	70 CC (Closed cup).	REFRACTIVE INDEX	1.401 - 1.404

10 STABILITY AND REACTIVITY

STABILITY

Stable under normal temperature conditions.

CONDITIONS TO AVOID

Avoid contact with acids and oxidising substances.

HAZARDOUS DECOMPOSITION PRODUCTS

Fire creates: Toxic gases/vapours/fumes of: Carbon monoxide (CO). Carbon dioxide (CO₂).

11 TOXICOLOGICAL INFORMATION

TOXIC DOSE 1 - LD 50	290 mg/kg (skn-rbt)
TOXIC DOSE 2 - LD 50	2000 mg/kg (oral rat)

INHALATION

Harmful by inhalation.

INGESTION

Harmful if swallowed.

SKIN CONTACT

Toxic in contact with skin.

EYE CONTACT

No specific health warnings noted.

ISOVALERIC ACID**TARGET ORGANS**

Skin Eyes Respiratory system, lungs

RTECS No

NY1400000

12 ECOLOGICAL INFORMATION**ECOTOXICITY**

No data on possible environmental effects have been found.

13 DISPOSAL CONSIDERATIONS**DISPOSAL METHODS**

Dispose of waste and residues in accordance with local authority requirements.

14 TRANSPORT INFORMATION

PROPER SHIPPING NAME CORROSIVE LIQUID, TOXIC, N.O.S. (ISOVALERIC ACID)

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UN NO. ROAD

2922

ADR CLASS

Class 8: Corrosive substances.

Class 6.1: Toxic substances.

ADR PACK GROUP

III

HAZARD NO. (ADR)

86 Corrosive or slightly
corrosive substance, toxic.

UN NO. SEA

2922

IMDG PACK GR.

III

UN NO. AIR

2922

AIR PACK GR.

III

15 REGULATORY INFORMATION**STATUTORY INSTRUMENTS**

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716).

APPROVED CODE OF PRACTICE

Classification and Labelling of Substances and Preparations Dangerous for Supply.

GUIDANCE NOTES

Workplace Exposure Limits EH40. Introduction to Local Exhaust Ventilation HS(G)37. CHIP for everyone HSG(108).

16 OTHER INFORMATION**GENERAL INFORMATION**

The information in this SDS was obtained from current and reputable sources. However, this data is provided without any warranty, express or implied, regarding its correctness or accuracy. It does not constitute a material specification for the product. The absence of any express statement in this SDS does not imply that this product may be in contact with any other material without hazard or risk of injury or damage. It is the users responsibility both to determine safe conditions for the use of this product and to assume liability for injury or damage resulting from improper use of this product. This SDS supercedes all previous SDS issues which should be discarded immediately.

ISSUED BY

D Symmonds

REVISION DATE

19/07/2006

REV. NO./REPL. SDS GENERATED 5

SAFETY DATA SHEET STATUS

Approved.

DATE

13-03-03

ISOVALERIC ACID

DISCLAIMER

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.