

Safety data for melamine

[Glossary](#) of terms on this data sheet.

The information on this web page is provided to help you to work safely, but it is intended to be an overview of hazards, not a replacement for a full Material Safety Data Sheet (MSDS). MSDS forms can be downloaded from the web sites of many chemical suppliers.

General

Synonyms: 1,3,5-triazine-2,4,6-triamine, 2,4,6-triamino-1,3,5-triazine, cyanuramide, cyanuric triamide, cyanurotriamide, cyanourotriamine, 2,4,6-triamino-3-triazine, s-triaminotriazine, 2,4,6-triamino sym-triazine, isomelamine, 1,3,5-triazine-2,4,6(1H,3H,5H)triime, cymel, sym triaminotriazine, aero, ammelide, hicophor pr, teoharn, theoharn, virset 656-4

Use: synthetic agent for the preparation of melamine resin and other resins, has been used (illegally) to boost apparent protein content of milk powders

Molecular formula: $C_3H_6N_6$

CAS No: 108-78-1

EINECS No: 203-615-4

Physical data

Appearance: white crystalline powder

Melting point: 345

Boiling point: sublimes

Vapour density:

Vapour pressure:

Density ($g\ cm^{-3}$): 1.57

Flash point:

Explosion limits:

Autoignition temperature:

Water solubility: slight

Stability

Stable. Incompatible with strong acids, strong oxidizing agents.
Nonflammable.

Toxicology

Harmful if swallowed, inhaled or absorbed through the skin.
Chronic exposure may cause cancer or reproductive damage.
Eye, skin and respiratory irritant.

Toxicity data

(The meaning of any toxicological abbreviations which appear in this section is given [here.](#))

ORL-RAT LD50 3248 mg kg⁻¹
ORL-MUS LD50 3296 mg kg⁻¹
SKN-RBT LD50 > 1000 mg kg⁻¹
IPR-RAT LDLO 3200 mg kg⁻¹
IPR-MUS LD50 800 mg kg⁻¹

Irritation data

(The meaning of any toxicological abbreviations which appear in this section is given [here.](#))

EYE-RBT 500 mg/24h mld

Risk phrases

(The meaning of any risk phrases which appear in this section is given [here.](#))

R20 R21 R22 R36 R37 R38 R45.

Transport information

(The meaning of any UN hazard codes which appear in this section is given [here.](#))

UN No 8027. Hazard class 9.

Personal protection

Safety glasses, gloves, good ventilation.

Safety phrases

(The meaning of any safety phrases which appear in this section is given [here.](#))

S26 S36 S37 S39 S45 S53.

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Melamine

CAS No.: 108-78-1

Category : organic

Molecular Formular: C₃H₆N₆

Molecular Weight: 126.15

Appearance: Pure white single arrises crystals

Standard: GB/T9567-1997

Specifications (table) :

Item	Index
	Superior-grade
Appearance	Pure white single arrises crystals
Purity,%, ≥	99.8
Moisture,%, ≤	0.1
Ash content,%, ≤	0.03
Formaldehyde dissolve test	All dissolve in 10 minutes
Turbidity(kaolin turbidity). ≤	20
Colority(platinum-cobalt) number	20
PH value	7.5-9.5