

Safety data for aluminium oxide

Click here for data on aluminium oxide in [student-friendly format](#), from the HSci project

[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: aluminum oxide, alumina, aluminium sesquioxide, alundum, abramant, Alumite, Conopal, corundum, dispal M, diadur, dotment 324, dural, exolon XW 60, faserton, jubenon R, ketjen B, lucalox, ludox CL, martoxin, Poraminar, Microgrit WCA, Ludox CL and numerous other trade names

Use: adsorbent, refractory material, catalyst, GC analysis component

Molecular formula: Al_2O_3

CAS No: 1344-28-1

EC No: 215-691-6

Physical data

Appearance: white granules or powder

Melting point: 2030 C

Boiling point: 2977 C

Vapour density:

Vapour pressure: 1 mm Hg at 2158 C

Specific gravity: 4.0

Flash point:

Explosion limits:

Autoignition temperature:

Shear strength: 330 MPa
Solubility in water: negligible

Stability

Stable. Incompatible with strong acids, strong bases, ethylene oxide, halocarbons, OF₂, sodium nitrate, vinyl acetate.

Toxicology

Not hazardous according to Directive 67/548/EEC. 8h TWA typically 10mg/m³.

Toxicity data

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

IHL-MOUSE TCLO 352 mg m⁻³

Risk phrases

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

Transport information

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

Non-hazardous for air, sea and road freight.

Personal protection

Minimize exposure.

Safety phrases

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

S22 S36 S38.

[Return to [Physical & Theoretical Chemistry Lab. Safety home page.](#)]

This information was last updated on March 12, 2007. We have tried to make it as accurate and useful as possible, but can take no responsibility for its use, misuse, or accuracy. We have not verified this information, and cannot guarantee that it is up-to-date.

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