

Material Safety Data Sheet

acc. to OSHA and ANSI

Printing date 05/30/2000 Reviewed on 05/05/2000

1 Identification of substance:

Product details:

Trade name: Perfluorodimethylcyclobutane

Stock number: 43036

Manufacturer/Supplier:

Alfa Aesar, A Johnson Matthey Company
Johnson Matthey Catalog Company, Inc.

30 Bond Street

Ward Hill, MA 01835-8099

Emergency Phone: (978) 521-6300

CHEMTREC: (800) 424-9300

Web Site: www.alfa.com

Information department: Health, Safety and
Environmental Department

Emergency information:

During normal hours the Health, Safety and
Environmental Department. After normal hours
call Chemtrec at (800) 424-9300.

2 Composition/Data on components:

Chemical characterization:

Description: (CAS#)

Perfluorodimethylcyclobutane (CAS#
28677-00-1), 100%

Identification number(s):

EINECS Number: 249-145-3
3 Hazards identification

Hazard description: · Not applicable

Information pertaining to particular dangers for
man and environment
Not applicable

4 First aid measures

After inhalation
Supply fresh air. If required, provide
artificial respiration. Keep patient warm.
Seek immediate medical advice.

After skin contact
Immediately wash with water and soap and rinse
thoroughly.
Seek immediate medical advice.

After eye contact
Rinse opened eye for several minutes under
running water. Then consult a doctor.

After swallowing Seek medical treatment.
5 Fire fighting measures

Suitable extinguishing agents
Use carbon dioxide, extinguishing powder or
foam. Water may be ineffective but may be used
for cooling exposed containers.

Special hazards caused by the material, its
products of combustion or
resulting gases:
In case of fire, the following can be released:
Carbon monoxide (CO)
Hydrogen fluoride (HF)

Protective equipment:
Wear self-contained respirator.
Wear fully protective impervious suit.
6 Accidental release measures

Person-related safety precautions:
Wear protective equipment. Keep unprotected
persons away.
Ensure adequate ventilation

Measures for environmental protection:
Do not allow material to be released to the
environment without proper governmental permits.

Measures for cleaning/collecting:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Additional information:
See Section 7 for information on safe handling
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.
7 Handling and storage

Handling

Information for safe handling:
Keep container tightly sealed.
Store in cool, dry place in tightly closed containers.
No special precautions are necessary if used correctly.

Information about protection against explosions and fires:
The product is not flammable

Storage

Requirements to be met by storerooms and receptacles:
No special requirements.

Information about storage in one common storage facility:
Store away from oxidizing agents.

Further information about storage conditions:
Refrigerate
Keep container tightly sealed.
Store in cool, dry conditions in well sealed containers.
8 Exposure controls and personal protection

Additional information about design of technical systems:
Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

Components with limit values that require monitoring at the workplace:
Not required.

Additional information: No data

Personal protective equipment

General protective and hygienic measures

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Remove all soiled and contaminated clothing immediately.

Wash hands before breaks and at the end of work.

Breathing equipment:

Use suitable respiratory protective device in case of insufficient ventilation.

Use suitable respirator when high concentrations are present.

Protection of hands: Impervious gloves

Eye protection: Safety glasses

Body protection: Protective work clothing.

9 Physical and chemical properties:

Form: Liquid

Color: Colorless

Odor: Nearly odorless

Unit	Method	Value/Range
Change in condition		
	Melting point/Melting range:	Not determined
	Boiling point/Boiling range:	
	45 ° C	
	Sublimation temperature / start:	Not determined
	Flash point:	Not applicable
	Ignition temperature:	Not determined

Decomposition temperature: Not
determined

Danger of explosion:
Product does not present an explosion hazard.

Explosion limits:

Lower: Not
determined

Upper: Not
determined

Vapor pressure: Not
determined

Density: at 20 ° C
1.62 g/cm³

Solubility in / Miscibility with

Water: Not miscible
or difficult to mix
10 Stability and reactivity

Thermal decomposition / conditions to be
avoided:
Decomposition will not occur if used and stored
according to specifications.

Materials to be avoided: Oxidizing agents

Dangerous reactions No dangerous reactions known

Dangerous products of decomposition:
Carbon monoxide and carbon dioxide
Hydrogen fluoride (HF)
11 Toxicological information

Acute toxicity:

Primary irritant effect:

on the skin: May cause irritation

on the eye: May cause irritation

Sensitization: No sensitizing effects known.

Subacute to chronic toxicity:

Other than potential irritation (see above), no information on illness or injury from acute or chronic exposure to this product is available.

Additional toxicological information:

To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.

12 Ecological information:

General notes:

Do not allow material to be released to the environment without proper governmental permits.

13 Disposal considerations

Product:

Recommendation

Consult state, local or national regulations for proper disposal.

Uncleaned packagings:

Recommendation:

Disposal must be made according to official regulations.

14 Transport information

Not a hazardous material for transportation.

DOT regulations:

Hazard class: None

Land transport ADR/RID (cross-border)

ADR/RID class: None

Maritime transport IMDG:

IMDG Class: None

Air transport ICAO-TI and IATA-DGR:

ICAO/IATA Class: None

Transport/Additional information:
Not dangerous according to the above
specifications.
15 Regulations

Product related hazard informations:
Observe the general safety regulations when
handling chemicals

National regulations
This product is not listed in the U.S.
Environmental Protection Agency Toxic Substances
Control Act Chemical Substance Inventory. Use
of this product is restricted to research and
development only.

Information about limitation of use:
For use only by technically qualified
individuals.
16 Other information:

Employers should use this information only as a
supplement to other information gathered by
them, and should make independent judgement of
suitability of this information to ensure proper
use and protect the health and safety of
employees. This information is furnished
without warranty, and any use of the product not
in conformance with this Material Safety Data
Sheet, or in combination with any other product
or process, is the responsibility of the user.

Department issuing MSDS: Health, Safety and
Environmental Department.

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