

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 04.01.2012

Version number 24

Revision: 18.07.2011

1 Identification of the substance/mixture and of the company/undertaking

- **Product identifier**
- **Molecular formula:** C3 D6 O
- **Structure formula:** C D3 C O C D3
- **Trade name:** (2H6)Acetone
- **MSDS number:** CH1671

- **EC number:**
211-563-9
- **Index number:**
606-001-00-8
- **Application of the substance / the preparation** Chemical products for laboratory

- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Carlo Erba Reagenti
Strada Rivoltana Km 6/7
I-20090 Rodano
Tel.: 0039 02 953251

Carlo Erba Reactifs - SDS
Chaussée du Vexin
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- **Further information obtainable from:**
Q.A / Normative
email ITALY: MSDS_CER@carloerbareagenti.com
email FRANCE: MSDS_CER-SDS@carloerbareactifs.com
- **Emergency telephone number:**
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tel: 0039 02 66 10 10 29
numéro d'appel d'urgence ORFILA: 01 45 42 59 59

2 Hazards identification

- **Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS02 flame

Flam. Liq. 2 H225 Highly flammable liquid and vapour.



GHS07

Eye Irrit. 2 H319 Causes serious eye irritation.
STOT SE 3 H336 May cause drowsiness or dizziness.

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



F+; Highly flammable

R11: Highly flammable.

- **Information concerning particular hazards for human and environment:**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for Substances of the EU", DIR. 67/548/EC, in the latest valid version, and of the "General Classification guideline for Preparations of the EU", DIR. 99/45/EC, in the latest valid version.

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- **Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
The substance is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS02 GHS07

- **Signal word** *Danger*
- **Hazard statements**
 - H225 *Highly flammable liquid and vapour.*
 - H319+EUH066 *Causes serious eye irritation. Repeated exposure may cause skin dryness or cracking.*
 - H336 *May cause drowsiness or dizziness.*
- **Precautionary statements**
 - P210 *Keep away from heat/sparks/open flames/hot surfaces. - No smoking.*
 - P241 *Use explosion-proof electrical/ventilating/lighting/equipment.*
 - P243 *Take precautionary measures against static discharge.*
 - P271 *Use only outdoors or in a well-ventilated area.*
 - P280 *Wear protective gloves/protective clothing/eye protection/face protection.*
 - P303+P361+P353 *IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.*
 - P304+P340 *IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.*
 - P305+P351+P338 *IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.*
 - P312 *Call a POISON CENTER or doctor/physician if you feel unwell.*
 - P337+P313 *If eye irritation persists: Get medical advice/attention.*
 - P370+P378 *In case of fire: Use for extinction: CO2, powder or water spray.*
 - P403+P233 *Store in a well-ventilated place. Keep container tightly closed.*
 - P403+P235 *Store in a well-ventilated place. Keep cool.*
 - P405 *Store locked up.*
 - P501 *Dispose of contents/container in accordance with local/regional/national/international regulations.*
- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** *Not applicable.*
- **vPvB:** *Not applicable.*

3 Composition/information on ingredients

- **Chemical characterization:** *Substances*
- **CAS No. Description**
(2H6)Acetone
- **Identification number(s)**
- **EC number:** *211-563-9*
- **Index number:** *606-001-00-8*

4 First aid measures

- **Description of first aid measures**
- **After inhalation:** *Supply fresh air; consult a doctor in case of complaints.*
- **After skin contact:** *If skin irritation continues, consult a doctor.*

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- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** Do not induce vomiting; call for medical help immediately.
- **Information for doctor:** Show the doctor this Material Safety Data Sheet.
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Firefighting measures

- **General Information:**
As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.
- **Extinguishing media**
- **Suitable extinguishing agents:** CO₂ or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet.
- **Special hazards arising from the substance or mixture** Carbon monoxide and carbon dioxide
- **Advice for firefighters**
- **Protective equipment:** Do not inhale gases in case of fire or combustion.
- **Additional information** Keep receptacles cool with water spray.

6 Accidental release measures

- **General Information:** Use proper personal protective equipment as indicated in Section 8.
- **Personal precautions, protective equipment and emergency procedures**
Keep away any ignition source.
Wear protective equipment. Keep unprotected persons away.
Use respiratory protective device against the effects of fumes.
- **Environmental precautions:**
Dilute with plenty of water after collecting the liquid.
Prevent seepage into sewage system, workpits and cellars.
Inform respective authorities in case of seepage into water course or sewage system.
- **Methods and material for containment and cleaning up:**
Collect the liquid with vacuum in a suitable container and absorb the remainder with a porous material (diatomite, acid binders, universal binders, etc).
Ensure adequate ventilation.
- **Reference to other sections**
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:**
- **Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Only handle and refill product in closed systems or under local exhaust.
Pneumatic conveyance only with nitrogen or other inert gases.
- **Information about fire - and explosion protection:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store in a cool location.
- **Information about storage in one common storage facility:** Store away from oxidizing agents.
- **Further information about storage conditions:** Store in cool, dry conditions in well sealed receptacles.

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· **Specific end use(s)** No further relevant information available.

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8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:** TLV not established.
- **Additional information:** The lists valid during the making were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:** Wash hands before breaks and at the end of work.
- **Respiratory protection:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
- **Protection of hands:**
The selected protective gloves have to satisfy the specifications of EU Directive 89/689/EEC and the standard EN 374 derived from it.
Rubber gloves
- **Material of gloves**
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
Neoprene gloves
- **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** Tightly sealed goggles
- **Body protection:**
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

9 Physical and chemical properties

- **Information on basic physical and chemical properties**
- **Molecular weight** 64.12 g
- **Appearance:**
- **Form:** Fluid
- **Colour:** Colourless
- **Odour:** Characteristic
- **Odour threshold:** Not determined.
- **pH-value:** Not determined.
- **Change in condition**
- **Melting point/Melting range:** -93.8°C
- **Boiling point/Boiling range:** 55°C
- **Flash point:** -17°C
- **Flammability (solid, gaseous):** Not applicable.
- **Ignition temperature:**
- **Decomposition temperature:** Not determined.
- **Self-igniting:** Not determined.
- **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

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- **Explosion limits:**
 - Lower:** Not determined.
 - Upper:** Not determined.
- **Vapour pressure:** Not determined.
- **Density at 20°C:** 0.88 g/cm³
- **Relative density:** Not determined.
- **Vapour density:** Not determined.
- **Evaporation rate:** Not determined.
- **Solubility in / Miscibility with water:** Fully miscible.
- **organic solvents:** Miscible with many organic solvents.

- **Segregation coefficient (n-octanol/water):** Not determined.
- **Viscosity:**
 - Dynamic:** Not determined.
 - Kinematic:** Not determined.
- **Other information:** No further relevant information available.

10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
Conditions to Avoid: Heat, flames and sparks.
- **Possibility of hazardous reactions:** No dangerous reactions known.
- **Conditions to avoid:** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** Carbon monoxide, Carbon dioxide.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
 - **on the skin:** No irritant effect.
 - **on the eye:** No relevant irritating effects.
- **Ingestion:** It can be harmful if swallowed.
- **Inhalation:** May be harmful if inhaled.
- **Sensitization:** No sensitizing effects known.
- **Other information (about experimental toxicology):** No more relevant data available.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability:** No further relevant information available.
- **Method**
- **Ecological information:** Not available
- **Other information:** The product is easily biodegradable.
- **Behaviour in environmental systems:**
- **Bioaccumulative potential:** No further relevant information available.
- **Mobility in soil:** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** No available data.

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- **Additional ecological information:**
- **General notes:** Generally not hazardous for water
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation**
 Must not be disposed together with household garbage. Do not allow product to reach sewage system. Reutilise if possible or contact a waste processors for recycling or safe disposal.
- **Waste disposal key:**
 The European Union does not establish uniform rules for the disposal of chemical waste, which are special waste. Their treatment and elimination of the domestic legislation of each country. So, in each case, you should contact the relevant authorities, or those companies legally authorized for elimination of waste. 2001/573/EC: Council Decision of 23 July 2001 amending the list of wastes contained in Decision 2000/532/EC.
 Council Directive 91/156/EEC of 18 March 1991 amending Directive 75/442/EEC on waste.
- **Uncleaned packaging:**
 The containers and packing materials contaminated with dangerous substances or preparations, have the same treatment products.
 Directive 94/62/EC of the European Parliament and the Council of 20 December 1994 on packaging and packaging waste.
- **Recommendation:**
 Disposal must be made according to official regulations.
 Packagings that may not be cleansed are to be disposed of in the same manner as the product.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

14 Transport information

- | | |
|---|---|
| · UN-Number | |
| · ADR, IMDG, IATA | UN1090 |
| · UN proper shipping name | |
| · ADR | 1090 ACETONE |
| · IMDG, IATA | ACETONE |
| · Transport hazard class(es) | |
| · ADR | |
| |  |
| · Class | 3 Flammable liquids. |
| · Label | 3 |
| <hr style="border-top: 1px dashed black;"/> | |
| · IMDG, IATA | |
| |  |
| · Class | 3 Flammable liquids. |
| · Label | 3 |

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· Packing group · ADR, IMDG, IATA	II
· Environmental hazards: · Marine pollutant:	No
· Special precautions for user · Danger code (Kemler): · EMS Number:	Warning: Flammable liquids. 33 F-E,S-D
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADR · Excepted quantities (EQ): · Limited quantities (LQ) · Transport category · Tunnel restriction code	E2 1L 2 D/E
· UN "Model Regulation":	ADR 2009 - Italian Official Translation, ed. ARS IT editions

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **National regulations:**

- **Technical instructions (air):**

Class	Share in %
NK	100.0

- **Waterhazard class:** Generally not hazardous for water.
- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing MSDS:** Q.A./Normative

- **Contact:**

ITALY:

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- **References**

ECDIN (Environmental Chem. Data and Information Network)

IUCLID (International Uniform Chemical Information Database)

NIOSH - Registry of Toxic Effects of Chemical Substances

Roth - Wassergefährdende Stoffe

Verschuieren - Handbook of Environmental Data on Organic Chemicals

ChemDAT - Safety Data Sheets from E.Merck on CD-ROM

Merian - Metals and their compounds in the environment

- **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

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IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

ICAO: International Civil Aviation Organization

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

· Sources

DIR. 67/548/EC, in the latest valid version.

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006, REACH.

Regulation (EC) N° 1272/2008 of the European Parliament and of the Council of 16 December 2008, CLP, in the latest valid version.

Globally Harmonized System, GHS

GB