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

1.1. Product identifier

Chemical description : Acetone , 2-Propanone , Propan-2-one , Dimethyl ketone , DMK .

Type of product : Pure product .

Reach registration number : 01-2119471330-49

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified use(s) : See table on the front page of the annex.

* Use(s) advised against : This product is not recommended for any industrial, professional or consumer use other than identified in table on the front page of the annex.
Not for use in ornamental articles, in tricks and jokes and in games (in accordance with Annex XVII to Regulation (EC) No 1907/2006) (3. Liquid substances or mixtures, which are regarded as dangerous according to the definitions in Council Directive 67/548/EEC and Directive 1999/45/EC).
Not for use in aerosol dispensers for entertainment and decorative purposes (in accordance with Annex XVII to Regulation (EC) No 1907/2006) (40. Substances meeting the criteria of flammability in Directive 67/548/EEC and classified as flammable, highly flammable or extremely flammable regardless of whether they appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or not).

1.3. Details of the supplier of the safety data sheet

* Company identification

Vosschemie Benelux bvba
Mechelsesteenweg 303
B-2500 Lier
Tel: +32 (0)3 489 28 28
Fax: +32 (0)3 488 19 27
mailto: info@vosschemie-benelux.com

1.4. Emergency telephone number

* Emergency phone number : Belgium : Antipoison Center - Brussels
TEL: +32(0)70/245.245

The Netherlands : National Poisoning Information Center - Bilthoven
TEL: +31(0)30/274.88.88 (Only for the purpose of informing medical personnel in cases of acute intoxications)

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

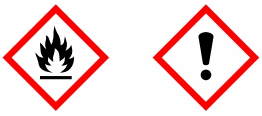
Flammable liquids - Category 2 - Danger (Flam. Liq. 2; H225)
Eye irritation - Category 2 - Warning (Eye Irrit. 2; H319)
Specific Target Organ Toxicity - Single exposure - Narcotic effects - Category 3 - Warning (STOT SE 3; H336)

2.2. Label elements

Label in accordance with Regulation (EC) No 1272/2008

• Dangerous ingredient(s) : Acetone

• Hazard pictogram(s)



• Signal word : Danger

• Hazard statements : H225 - Highly flammable liquid and vapour. H319 - Causes serious eye irritation. H336 - May cause drowsiness or dizziness. EUH066 - Repeated exposure may cause skin dryness or cracking.

SECTION 2. Hazards identification (continued)

• Precautionary statements

* - Prevention : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P243 - Take precautionary measures against static discharge. P280 - Wear protective gloves/protective clothing/eye protection/face protection.

* - Response : P305+P351+P338 - IF IN EYES : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313 - If eye irritation persists: Get medical advice/attention.

- Storage : P403+P233 - Store in well-ventilated place. Keep container tightly closed.

* - Disposal considerations : P501 - Dispose of contents and/or container to an approved waste disposal plant.

2.3. Other hazards

Physical/chemical hazards : May form peroxides.

Hazards for the health : A health dangerous concentration in the air will very quickly be reached by evaporation of this substance at app. 20°C; even faster by spraying.

Hazards for the environment : No significant danger. This product is no substance or contains no PBT or vPvB (in accordance with Annex XIII).

Hazards for the safety : Vapour may form explosive mixture with air.

SECTION 3. Composition/information on ingredients

3.1. Substances

Name component(s)		Weight %	CAS nr	EINECS nr	Index nr	Reach nr	CLASSIFICATION
Acetone	:	100 %	67-64-1	200-662-2	606-001-00-8	01-2119471330-49	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336 EUH066

The full text of the (EU)H-statements is in section 16.

SECTION 4. First aid measures

4.1. Description of first aid measures

General : In case of doubt or persistent symptoms, call a physician.
Never give anything by mouth to an unconscious person.

First Aid Measures

- Inhalation : Remove victim into fresh air.
Allow the affected person to rest in semi-sitting position.
If not breathing, give artificial respiration.
Consult a doctor.

- Skin Contact : Consult doctor if irritation develops.
Remove contaminated clothing.
Rinse skin immediately with plenty of water. (shower if necessary).

- Eye Contact : Rinse immediately thoroughly and long (at least 15 min.) with plenty of water.
Remove contact lenses.
Consult eye doctor.
Keep rinsing or dripping the eye during transport.

- Ingestion : DO NOT INDUCE VOMITING. Rinse mouth with water.
Seek medical attention or take to hospital.

4.2. Most important symptoms and effects, both acute and delayed

See section 11.

SECTION 4. First aid measures (continued)

4.3. Indication of any immediate medical attention and special treatment needed

For specialist advice doctors should contact the NVCI or the Belgian Poison center.

SECTION 5. Firefighting measures

5.1. Extinguishing media

Extinguishing Media

- Suitable : Extinguishing powder , Alcohol resistant foam , Carbon dioxide (CO2) , Water spray .
- Not to be used : Heavy water stream .

5.2. Special hazards arising from the substance or mixture

Special Exposure Hazards : Fire may liberate carbon oxides (CO) and smoke.

5.3. Advice for firefighters

Special Protective Equipment for Firefighters : Use self-contained breathing apparatus and wear protective clothes when in close proximity to fire.

Special Procedures : Apply water spray or fog to cool nearby equipment. Avoid fire-fighting water to enter environment.

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal Precautions : Eliminate every possible source of ignition (open fire, sparks, smoking, ...).
Evacuate all personnel immediately and ventilate area.
Avoid breathing vapour and contact with skin, eyes and clothing. Wear recommended personal protective equipment. (See section 8)

6.2. Environmental precautions

Environmental Precautions : Shut off leaks if without risks.
Dike in the spilled product as much as possible with inert material.
Prevent entry of product in public water, sewers or soil.
Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for Cleaning Up : Collect the spillage in closable, suitable disposal containers.
Clean up any spills as soon as possible, using an inert absorbent material.
Residue is to be washed down with plenty of water.

6.4. Reference to other sections

For personal protection, see section 8.
For the removal of the waste product, see section 13.

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Handling : AVOID FOG TRANSFORMATION !
Avoid breathing vapour and contact with skin, eyes and clothing. Wear recommended personal protective equipment. (See section 8)
Wash hands before and after working with the product.
When using, do not eat, drink or smoke.
Emergency eye wash fountains and showers should be available in the immediate vicinity of any potential exposure.

SECTION 7. Handling and storage (continued)

7.2. Conditions for safe storage, including any incompatibilities

* Storage : Keep only in the original, safely locked container in a dry, cool, dark, well ventilated and fireproof place.
All dangerous products should be placed on a drip tray or should be barreled.
Store away from all heat sources, including direct sunlight.
Keep away from : Oxidizing agents , Bases , Amines .

* Protection against Fire and Explosion : Remove all sources of ignition (open fire, sparks, smoking, ...).
With a temperature equal to or higher than the flash point, the mixture steam-air may create a highly flammable and explosive mixture.
Vapour is heavier than air and spreads along the ground with risk of ignition on distance.
Take measures against electrostatic discharges.
Do not use compressed air to either agitate or transfer contents of storage containers (tanks) / shipping drums containing this material.
Always use explosionproof electrical equipment.

Packaging Material : Aluminium , Galvanised carbon steel , Stainless steel .

Insuitable Packaging Material : Synthetic material , Rubber .

7.3. Specific end use(s)

For identified uses, see subsection 1.2 and/or exposure scenarios.

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

* Occupational Exposure Limits : Acetone : Limit value (BE) : 500 ppm (1210 mg/m³) (2014)
Acetone : Short time value (BE) : 1000 ppm (2420 mg/m³) (2014)
Acetone : Limit value (TWA 8 h) (NL) : 510 ppm (1210 mg/m³) (2007)
Acetone : Limit value (TWA 15 min) (NL) : 1020 ppm (2420 mg/m³) (2007)

Biological limit values : They will be included when available.

DNELs :
- Acetone : Worker, acute - local effects, inhalation : 2420 mg/m³
- Acetone : Worker, long-term - systemic effects, inhalation : 1210 mg/m³
- Acetone : Worker, long-term - systemic effects, dermal : 186 mg/kg bw/ day
- Acetone : Consumer, long-term - systemic effects, inhalation : 200 mg/m³
- Acetone : Consumer, long-term - systemic effects, dermal : 62 mg/kg bw/ day
- Acetone : Consumer, long-term - systemic effects, oral : 62 mg/kg bw/ day

* PNECs :
- Acetone : Fresh water : 10,6 mg/l
- Acetone : Marine water : 1,06 mg/l
- Acetone : Fresh water sediment : 30,4 mg/kg
- Acetone : Marine water sediment : 3,04 mg/kg
- Acetone : Soil : 29,5 mg/kg
- Acetone : Intermittent release : 21,5 mg/l
- Acetone : Sewage treatment plant : 100 mg/l

8.2. Exposure controls

Engineering Measures : Ventilation , Local exhaust .

Personal Protection Equipment

- Respiratory protection : CE-approved respirator for low boiling organic vapours and solvents (Type AX, brown).

- Skin protection : Suitable protective clothing .

* - Hand protection : Suitable material for safety gloves (EN 374):
The suitability of the gloves and the breakthrough time for a specific workplace should be discussed with the producers of the protective gloves.
- material : Butyl rubber
- thickness : 0,5 mm
- breakthrough time : > 480'

SECTION 8. Exposure controls/personal protection (continued)

- Eye/Face protection	: Closed safety glasses or face shield.
Environmental exposure controls	: See sections 6, 7, 12 and 13.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

	Physical State (20°C)	: Liquid .
	Form/Colour	: Clear , Colourless .
	Odour	: Aromatic odour .
*	Odour threshold	: 19,8 ppm
*	pH value	: 7 (10 g/l)
	Melting/Freezing point	: -94,7 °C
	Boiling Point/Range (1013 hPa)	: 56 °C
	Flash point	: -17 °C
	Evaporation rate	: 2 (Ether = 1) 5,6 - 14,4 (n-Butyl acetate = 1)
	Explosion limits in air	: 2,5 - 14,3 vol.%
	Vapour pressure (20°C)	: 24 kPa
	Vapour pressure (50°C)	: 80 kPa
	Relative vapour density (air=1)	: 2,0
	Relative density of saturated vapour/air mixture (air=1)	: 1,2
	Relative density (water=1)	: 0,8
	Solubility in water	: Complete solubility .
	Soluble in	: Alcohol , Chloroform , Ether , Most oils , ...
	Log P Octanol/Water (20°C)	: -0,24
	Auto-ignition temperature	: 465 °C
	Minimum ignition energy	: 1,15 mJ
	Decomposition temperature	: Not applicable.
	Viscosity (20°C)	: 0,32 mPa.s
	Explosive properties	: No chemical groups associated with explosive properties .
	Oxidizing properties	: No chemical groups associated with oxidizing properties .

9.2. Other information

Surface tension (20°C)	: 23,7 mN/m
Specific leading	: 4,9*10E5 pS/m
% Volatiles (by weight)	: > 99

SECTION 10. Stability and reactivity

10.1. Reactivity

Reactivity : Reacts violently with oxidizing agents.

10.2. Chemical stability

Stability : Stable at normal circumstances .

10.3. Possibility of hazardous reactions

Hazardous reactions : Possible formation of peroxides.

SECTION 10. Stability and reactivity (continued)

10.4. Conditions to avoid

* Conditions to avoid : High temperatures , Light .

10.5. Incompatible materials

Materials to avoid : Oxidizing agents , Bases , Amines , Rubber , Synthetic material .

10.6. Hazardous decomposition products

Hazardous Decomposition Products : Carbon oxides .

SECTION 11. Toxicological information

11.1. Information on toxicological effects

Acute toxicity

* - Inhalation : High concentrations may produce central nervous system depression and loss of consciousness (slightly narcotical effect).
Symptoms include: Sore throat , Cough , Dizziness , Drowsiness , Unconsciousness .
• Acetone : LC50 (Rat, inhalation, 4 h) : 76 mg/l (Air)

- Skin contact : Symptoms include: Redness , Pain .
• Acetone : LD50 (Rabbit, dermal) : > 15800 mg/kg

- Ingestion : Symptoms include: Burning feeling , Stomach complaints , Nausea , Vomiting .
• Acetone : LD50 (Rat, oral) : 5800 mg/kg (OECD Guideline 401)

Skin corrosion/irritation : Repeated or prolonged skin contact may cause dermatitis and defatting.

Serious eye damage/irritation : Causes serious eye irritation.

* Aspiration hazard : Not considered hazardous.

Respiratory or skin sensitisation : Not sensitive .

Carcinogenicity : Not listed as carcinogenic .

Mutagenicity : Not listed as mutagenic .

Reproductive toxicity : Not listed for reproductive toxicity .

Specific target organ toxicity - single exposure : To human : May cause drowsiness or dizziness.

Specific target organ toxicity - repeated exposure : To human : Listed not for organ toxicity
For animals : No effects known.

SECTION 12. Ecological information

12.1. Toxicity

* Ecotoxicity : • Acetone : LC50 (Fish, 96 h) : 5540 mg/l (Oncorhynchus mykiss)
• Acetone : EC50 (Daphnia pulex, 48 h) : 8800 mg/l
• Acetone : NOEC (Algae, 8 d) : 530 mg/l (Microcystis aeruginosa)

12.2. Persistence and degradability

Persistence and degradability : • Acetone : Persistence and degradability : Easily biologically degradable.

12.3. Bioaccumulative potential

Bioaccumulation : • Acetone : Bioaccumulation : Bioaccumulation not expected .

12.4. Mobility in soil

* Mobility : • Acetone : Mobility : Very high potential for mobility in soil.

12.5. Results of PBT and vPvB assessment

Evaluation : • Acetone : PBT/vPvB : No

SECTION 12. Ecological information (continued)

12.6. Other adverse effects

Photochemical ozone creation potential	: No data available.
Ozone depletion potential	: No data available.
Endocrine disrupting potential	: No data available.
Global warming potential	: No data available.

SECTION 13. Disposal considerations

13.1. Waste treatment methods

Waste from residues/Unused products	: The product has to be destroyed according to national or local legislation, by a company specialised in handling hazardous waste products.
European list of waste products	: XXXXXX - European waste product code. This code is assigned on the basis of the most current applications and can not be representative for pollutions which are arisen at the effective use of the product. The producer of the waste has to evaluate its process himself and has to grant the appropriate waste coding. See Decision 2001/118/EC.
Removal contaminated packaging	: Packing is to be used exclusively for the packing of this product. After use, empty and close the packing very carefully. In case of returned packing, the empty packing can be offered back to the supplier.

SECTION 14. Transport information

14.1. UN number

UN Number	: 1090

14.2. UN proper shipping name

ADR/RID Name	: UN 1090 Acetone, 3, II, (D/E)
ADN Name	: UN 1090 Acetone , 3, II
IMDG Name	: UN 1090 Acetone , 3, II, (-17°C)
IATA Name	: UN 1090 Acetone , 3, II

14.3. Transport hazard classe(s)

Class	: 3

14.4. Packing group

Packaging Group	: II

14.5. Environmental hazards

Environmentally hazard	: No
Marine pollutant	: No

14.6. Special precautions for user

Danger number	: 33
Hazard Label(s)	: 3
EmS-N°	: F-E S-D

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Type ship	: Not applicable.
Pollution category	: Z

SECTION 15. Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Inventories : Australian inventory (AICS): Listed in inventory.
Canadian inventory (DSL): Listed in inventory.
Chinese inventory (IECS): Listed in inventory.
European inventory (EINECS): Listed in inventory.
Japanese inventory (ENCS): Listed in inventory.
Korean inventory (KECI): Listed in inventory.
Philippine inventory (PICCS): Listed in inventory.
Inventory of the United States (TSCA): Listed in inventory.

NFPA n° : 1-3-0

Relevant EU Rule(s) : Directive 96/82/EC of the Council of 9 December 1996 on the control of major-accident hazards involving dangerous substances
Directive 98/24/EC of the Council of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work
Directive 1999/13/EC of the Council of 11 March 1999 on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain activities and installations
Directive 2004/42/CE of the European Parliament and of the Council of 21 April 2004 on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products and amending Directive 1999/13/EC
Decision 2001/118/EC of the Commission of 16 January 2001 amending Decision 2000/532/EC as regards the list of wastes
Regulation (EC) No 273/2004 of the European Parliament and of the Council of 11 February 2004 on drug precursors
Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006
Regulation (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (Reach)

* The restrictions in Annex XVII to Regulation (EC) No 1907/2006 must be observed.

National regulations

- Germany : WGK : 1

* - Netherlands : Water damaging : 9
Decontamination exertion : B

15.2. Chemical Safety Assessment

* A chemical safety assessment has been carried out for the material.

SECTION 16. Other information

This safety data sheet has been drawn up in accordance with Regulation (EU) No 453/2010.
This safety data sheet is exclusively made for industrial/professional use.

* Has changed compared to previous revision.

Changes : Section 1 , Section 2 , Section 7 , Section 8 , Section 9 , Section 10 , Section 11 , Section 12 , Section 15 , Section 16 .

* Sources of used key data : The information contained herein is based on the present state of our knowledge (Producer(s) , Chemical cards , ...)
See also on the webaddress:
http://apps.echa.europa.eu/registered/registered-sub.aspx#search

SECTION 16. Other information (continued)

* (EU)H-statement(s) : H225 - Highly flammable liquid and vapour.
H319 - Causes serious eye irritation.
H336 - May cause drowsiness or dizziness.
EUH066 - Repeated exposure may cause skin dryness or cracking.

* List of abbrevations and acronyms : ADN (Accord européen relatif au transport international des marchandises Dangereuses par voie de Navigation interieur) : European agreement concerning the international carriage of dangerous goods by inland waterways
ADR (Accord européen relatif au transport international des marchandises Dangereuses par Route) : European agreement concerning the international carriage of dangerous goods by road
CO : Carbon monoxide
DNEL (Derived No Effect Level) : an estimated safe exposure level
EC50 : median Effective Concentration
EmS (Emergency Schedule) : the first code refers to the relevant fire schedule and the second code refers to the relevant spillage schedule
Eye Irrit. 2 : Eye irritation - Category 2
Flam. Liq. 2 : Flammable liquids - Category 2
IATA (International Air Transport Association) : provisions concerning the international carriage of dangerous goods by air
IMDG (International Maritime Dangerous Goods code)
LC50 : median Lethal Concentration
LD50 : median Lethal Dose
NFPA (National Fire Protection Association) or fire diamant
NOEC (No Observed Effect Concentration)
NVCI : National Poisoning Information Center
OECD : Organisation for Economic Cooperation and Development
PBT : persistent, bioaccumulative and toxic
PNEC (Predicted No Effect Concentration) : concentration below which exposure to a substance is not expected to cause adverse effects
RCP (Reciproke Calculation Procedure)
REACH : Registration, Evaluation, Authorisation and restriction of Chemicals
RID (Règlement concernant le transport International ferroviaire des marchandises Dangereuses) : Regulation concerning the International carriage of Dangerous goods by rail
STOT SE 3 : Specific Target Organ Toxicity - Single exposure - Category 3
STOT RE : Specific Target Organ Toxicity - Repeated exposure
TWA (Time-Weighted Average) : the average exposure over a specified period
WGK (Wassergefahrdungsklasse) : a German classification of substances that indicate the environmental hazard for surface water
vPvB : very persistent and very bioaccumulative

This information is to our knowledge correct and complete on the date of issue of this safety data sheet. The information only concerns the product and does not give any guarantee for the quality and the completeness of the properties of the product, or in case of mixing or using in any other process. It remains the responsibility of the user to assure himself that the information is suitable and complete concerning the special use he makes of the product.
BRENNTAG denies all responsibility for loss or damage resulting from the use of these data.

End of document