



Safety data sheet

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Chemetall (now part of BASF Group) Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

Date / Revised: 04.07.2018

Version: 1.0

Product: **Ardrox 9D1B, Aerosol**

(ID no. 30687321/SDU_GEN_GB/EN)

Date of print 07.08.2018

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

1.1. Product identifier

Ardrox 9D1B, Aerosol

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

Recommended use: Developer

Not recommended use: None known

1.3. Details of the supplier of the safety data sheet

Company:

Chemetall Ltd.

Denbigh Road 65

Bletchley Milton Keynes MK1 1PB

Great Britain

Telephone: +44 1908 649333

E-mail address: sds.global-chemetall@basf.com

1.4. Emergency telephone number

Telephone: +49 180 2273-112

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Aerosols, Category 1

H222: Extremely flammable aerosol.

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H229: Pressurised container: May burst if heated.

Eye irritation, Category 2

H319: Causes serious eye irritation.

Specific target organ toxicity - single exposure, Category 3, Central nervous system

H336: May cause drowsiness or dizziness.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



Signal word : Danger

Hazard statements :
 H222 Extremely flammable aerosol.
 H229 Pressurised container: May burst if heated.
 H319 Causes serious eye irritation.
 H336 May cause drowsiness or dizziness.

Supplemental Hazard Statements : EUH066 Repeated exposure may cause skin dryness or cracking.

Precautionary statements :

Prevention:

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 P211 Do not spray on an open flame or other ignition source.
 P251 Do not pierce or burn, even after use.
 P260 Do not breathe spray.
 P262 Do not get in eyes, on skin, or on clothing.
 P271 Use only outdoors or in a well-ventilated area.
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
 P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P308 + P313 IF exposed or concerned: Get medical advice/ attention.

Storage:

P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F.

Disposal:

P501 Dispose of contents/ container to an approved waste

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disposal plant.

Hazardous components which must be listed on the label:

Acetone

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

The information required is contained in this Material Safety Data Sheet.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical nature : Mixture of organic solvents.

Hazardous components

Chemical name	CAS-No. EC-No. Registration number	Classification (REGULATION (EC) No 1272/2008)	Concentration (% w/w)
Acetone	67-64-1 200-662-2 01-2119471330-49	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336	>= 25 - < 50
Propane	74-98-6 200-827-9 01-2119486944-21	Flam. Gas 1; H220 Press. Gas Liquefied gas; H280 Note U (Table 3.1)	>= 10 - < 25
Propan-2-ol	67-63-0 200-661-7 01-2119457558-25	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336	>= 3 - < 10
Isobutane	75-28-5 200-857-2 01-2119485395-27	Flam. Gas 1; H220 Press. Gas Liquefied gas; H280 Note U (Table 3.1) Note C	>= 1 - < 2.5
Ethanol, 2,2'-[[3-[(2-hydroxyethyl)amino]pr opyl]imino]bis-, N-tallow alkyl derivs.	90367-27-4 291-275-8 01-2119962190-43	Acute Tox. 4; H302 Skin Corr. 1B; H314 STOT RE 1; H372 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 M-Factor Acute aquatic toxicity:10 M-Factor Chronic aquatic toxicity:1	>= 0.025 - < 0.1
Substances with a workplace exposure limit :			

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Butane	106-97-8 203-448-7 01-2119474691-32	Flam. Gas 1; H220 Press. Gas Liquefied gas; H280	>= 25 - < 50
Talc	14807-96-6 238-877-9	Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.	>= 2.5 - < 10

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

- General advice : First Aid responders should pay attention to self-protection and use the recommended protective clothing
Move out of dangerous area.
Take off contaminated clothing and shoes immediately.
- If inhaled : Move to fresh air.
If symptoms persist, call a physician.
- In case of skin contact : Wash off with soap and plenty of water.
If symptoms persist, call a physician.
- In case of eye contact : Rinse immediately with plenty of water, also under the eyelids.
Consult a physician.
- If swallowed : Rinse mouth with water.
Do NOT induce vomiting.
Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

- Symptoms : May cause drowsiness or dizziness.
- Risks : Causes serious eye irritation.
Repeated exposure may cause skin dryness or cracking.

4.3 Indication of any immediate medical attention and special treatment needed

- Treatment : Treat symptomatically.
For specialist advice physicians should contact the Poisons Information Service.

SECTION 5: Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media : Carbon dioxide (CO2)
Dry powder
Alcohol-resistant foam

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Water spray

Unsuitable extinguishing media : High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting : Heating or fire can release toxic gas.
Carbon monoxide
Carbon dioxide (CO₂)

5.3 Advice for firefighters

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

Further information : Use water spray to cool unopened containers.
Risk of bursting.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Wear personal protective equipment.

6.2 Environmental precautions

Environmental precautions : Do not flush into surface water or sanitary sewer system.
Avoid subsoil penetration.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Ensure adequate ventilation.
Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

6.4 Reference to other sections

For further information see Section 8 of the safety data sheet.

For disposal considerations see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Provide sufficient air exchange and/or exhaust in work rooms.
Provide exhaust ventilation close to floor level.
Have eye wash bottle or eye rinse ready at the work place.
To avoid risks to man and the environment, comply with the instructions for use.

Advice on protection against fire and explosion : Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges. Vapours

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may form explosive mixtures with air. Normal measures for preventive fire protection.

Hygiene measures : Take off contaminated clothing and shoes immediately. Keep away from food, drink and animal feedingstuffs. Wash hands before breaks and immediately after handling the product. Avoid contact with skin and eyes. Do not breathe vapours, aerosols.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Keep containers tightly closed in a dry, cool and well-ventilated place. Store in a place accessible by authorized persons only. To maintain product quality, do not store in heat or direct sunlight.

Recommended storage temperature : < 50 °C

7.3 Specific end use(s)

Specific use(s) : Developer

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
Butane	106-97-8	TWA	600 ppm 1,450 mg/m3	GB EH40
Further information	Capable of causing cancer and/or heritable genetic damage. The identified substances include those which: - are assigned the risk phrases 'R45: May cause cancer'; 'R46: may cause heritable genetic damage'; 'R49: May cause cancer by inhalation' or - a substance or process listed in Schedule 1 of COSHH., Carcinogenic only applies if butane contains more than 0.1% of buta-1,3-diene			
		STEL	750 ppm 1,810 mg/m3	GB EH40
Further information	Capable of causing cancer and/or heritable genetic damage. The identified substances include those which: - are assigned the risk phrases 'R45: May cause cancer'; 'R46: may cause heritable genetic damage'; 'R49: May cause cancer by inhalation' or - a substance or process listed in Schedule 1 of COSHH., Carcinogenic only applies if butane contains more than 0.1% of buta-1,3-diene			
Acetone	67-64-1	TWA	500 ppm 1,210 mg/m3	2000/39/EC
Further information	Indicative			
		TWA	500 ppm 1,210 mg/m3	GB EH40
		STEL	1,500 ppm 3,620 mg/m3	GB EH40

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Propan-2-ol	67-63-0	TWA	400 ppm 999 mg/m ³	GB EH40
		STEL	500 ppm 1,250 mg/m ³	GB EH40
Talc	14807-96-6	TWA (Respirable dust)	1 mg/m ³	GB EH40
Further information	<p>For the purposes of these limits, respirable dust and inhalable dust are those fractions of airborne dust which will be collected when sampling is undertaken in accordance with the methods described in MDHS14/3 General methods for sampling and gravimetric analysis of respirable and inhalable dust, Talc is defined as the mineral talc together with other hydrous phyllosilicates including chlorite and carbonate materials which occur with it, but excluding amphibole asbestos and crystalline silica., The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg.m⁻³ 8-hour TWA of inhalable dust or 4 mg.m⁻³ 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limit., Most industrial dusts contain particles of a wide range of sizes. The behaviour, deposition and fate of any particular particle after entry into the human respiratory system and the body response that it elicits, depend on the nature and size of the particle. HSE distinguishes two size fractions for limit-setting purposes termed 'inhalable' and 'respirable'. Inhalable dust approximates to the fraction of airborne material that enters the nose and mouth during breathing and is therefore available for deposition in the respiratory tract. Respirable dust approximates to the fraction that penetrates to the gas exchange region of the lung. Fuller definitions and explanatory material are given in MDHS14/3., Where dusts contain components that have their own assigned WEL, all the relevant limits should be complied with., Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used</p>			

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health effects	Value
Acetone	Workers	Inhalation	Long-term systemic effects	1210 mg/m ³
	Workers	Inhalation	Long-term local effects	2420 mg/m ³
	Workers	Inhalation	Acute systemic effects	1210 mg/m ³
	Workers	Skin contact	Long-term systemic effects	186 mg/kg bw/day
Propan-2-ol	Workers	Inhalation	Long-term systemic effects	500 mg/m ³
	Workers	Skin contact	Long-term systemic effects	888 mg/kg bw/day
Ethanol, 2,2'-[[3-[(2-hydroxyethyl)amino]propyl]imino]bis-, N-tallow alkyl derivs.	Workers	Inhalation	Long-term systemic effects	0.12 mg/m ³
	Workers	Skin contact	Long-term systemic effects	0.017 mg/kg bw/day

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Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
Acetone	Fresh water	10.6 mg/l
	Marine water	1.06 mg/l
	Sewage treatment plant	100 mg/l
	Fresh water sediment	30.04 mg/kg dry weight (d.w.)
	Marine sediment	3.04 mg/kg dry weight (d.w.)
	Soil	29.5 mg/kg dry weight (d.w.)
Propan-2-ol	Fresh water	140.9 mg/l
	Marine water	140.9 mg/l
	Sewage treatment plant	2251 mg/l
	Sediment	552 mg/kg dry weight (d.w.)
	Soil	28 mg/kg dry weight (d.w.)
Ethanol, 2,2'-[[3-[(2-hydroxyethyl)amino]propyl]imino]bis-, N-tallow alkyl derivs.	Fresh water	0.002 mg/l
	Marine water	0.0002 mg/l
	Intermittent use/release	0.0013 mg/l
	Sewage treatment plant	1.6 mg/l
	Fresh water sediment	7.5 mg/kg dry weight (d.w.)
	Marine sediment	0.75 mg/kg dry weight (d.w.)
	Soil	5 mg/kg dry weight (d.w.)

8.2 Exposure controls

Engineering measures

Ensure adequate ventilation, especially in confined areas.

Electrical equipment should be protected to the appropriate standard.

Use only explosion-proof equipment.

Personal protective equipment

Eye protection : Eye protection (EN 166)
Tightly fitting safety goggles

Hand protection :
Material : butyl-rubber

Remarks : Protective gloves complying with EN 374. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.

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Skin and body protection	:	Chemical resistant protective clothing according to DIN EN 13034 (Type 6)
Respiratory protection	:	In case of insufficient ventilation, wear suitable respiratory equipment. Recommended Filter type: AX-P2

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	:	aerosol
Colour	:	white
Odour	:	characteristic
Odour Threshold	:	No data available
pH	:	No data available
Melting point/freezing point	:	No data available
Boiling point/boiling range	:	-40 °C Propellant
Flash point	:	-18 °C Method: ASTM D 93 Active ingredient < 0 °C Propellant
Evaporation rate	:	No data available
Flammability (solid, gas)	:	No data available
Upper explosion limit	:	No data available
Lower explosion limit	:	No data available
Vapour pressure	:	No data available
Relative vapour density	:	No data available
Relative density	:	No data available
Density	:	0.88 g/cm ³ (20 °C) Active ingredient
Solubility(ies)		
Water solubility	:	completely miscible
Solubility in other solvents	:	No data available

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Partition coefficient: n-octanol/water	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Viscosity, dynamic	:	No data available
Viscosity, kinematic	:	No data available
Flow time	:	No data available
Explosive properties	:	Vapours may form explosive mixture with air.
Oxidizing properties	:	No data available

9.2 Other information

Other physico-chemical properties: This information is not available/not determined.

SECTION 10: Stability and reactivity

10.1 Reactivity

No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions : Vapours may form explosive mixture with air.
Pressurised container: May burst if heated.

10.4 Conditions to avoid

Conditions to avoid : Keep away from open flames, hot surfaces and sources of ignition.
Strong sunlight for prolonged periods.

10.5 Incompatible materials

Materials to avoid : Strong reducing agents
Oxidizing agents
Strong bases

10.6 Hazardous decomposition products

No decomposition if stored and applied as directed.

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SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product:

Based on available data, the classification criteria are not met.

Acute toxicity

Components:

Acetone:

Acute oral toxicity : LD50 (Rat): 5,800 mg/kg
Method: OECD Test Guideline 401

Acute inhalation toxicity : LC50 (Rat): ca. 76 mg/l
Exposure time: 4 h

Acute dermal toxicity : LD50 (Rabbit): > 158,000 mg/kg

Propan-2-ol:

Acute oral toxicity : LD50 (Rat): 5,840 mg/kg
Method: OECD Test Guideline 401

Acute inhalation toxicity : LC50 (Rat): 30 mg/l
Exposure time: 4 h

Acute dermal toxicity : LD50 (Rabbit): 13,900 mg/kg
Method: OECD Test Guideline 402

Ethanol, 2,2'-[[3-[(2-hydroxyethyl)amino]propyl]imino]bis-, N-tallow alkyl derivs.:

Acute oral toxicity : LD50 (Rat): > 300 - 2,000 mg/kg

Skin corrosion/irritation

Product:

Remarks: May cause skin irritation in susceptible persons.

Serious eye damage/eye irritation

Product:

Remarks: Causes serious eye irritation.

Respiratory or skin sensitisation

Product:

Remarks: No data available

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Germ cell mutagenicity

Product:

Based on available data, the classification criteria are not met.

Germ cell mutagenicity

Components:

Acetone:

- | | | |
|-----------------------|---|---|
| Genotoxicity in vitro | : | Test Type: Ames test
Method: OECD Test Guideline 471
Result: negative |
| | : | Test Type: Ames test
Method: OECD Test Guideline 476
Result: negative |
| Genotoxicity in vivo | : | Test Type: in vivo assay
Species: Mouse
Application Route: Oral
Result: negative |

Carcinogenicity

Product:

Based on available data, the classification criteria are not met.

Reproductive toxicity

Product:

Based on available data, the classification criteria are not met.

STOT - single exposure

Product:

Based on available data, the classification criteria are not met.

STOT - repeated exposure

Product:

Based on available data, the classification criteria are not met.

Aspiration toxicity

Product:

Based on available data, the classification criteria are not met.

Neurological effects

Product:

May cause drowsiness or dizziness.

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Further information

Product:

Remarks: Repeated exposure may cause skin dryness or cracking.

SECTION 12: Ecological information

12.1 Toxicity

Product:

Ecotoxicology studies for the product are not available.

Components:

Acetone:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 5,540 mg/l
Exposure time: 96 h
Test Type: static test

Toxicity to daphnia and other : EC50 (Daphnia magna (Water flea)): 8,800 mg/l
aquatic invertebrates Exposure time: 48 h
Test Type: static test

NOEC (Daphnia magna (Water flea)): 2,212 mg/l
Exposure time: 28 d
Test Type: flow-through test

Toxicity to algae : NOEC (Algae): 430 mg/l
Exposure time: 96 h
Test Type: static test

NOEC (Microcystis aeruginosa (blue-green algae)): 530 mg/l
Exposure time: 8 d
Test Type: static test

Toxicity to microorganisms : (activated sludge):
Exposure time: 30 min
Test Type: Respiration inhibition

Propan-2-ol:

Toxicity to fish : LC50 (Leuciscus idus (Golden orfe)): 8,970 mg/l
Exposure time: 48 h

LC50 (Pimephales promelas (fathead minnow)): 9,640 mg/l
Exposure time: 96 h

Toxicity to daphnia and other : LC50 (Daphnia magna (Water flea)): 9,714 mg/l
aquatic invertebrates Exposure time: 24 h

Toxicity to algae : EC50 (Scenedesmus subspicatus): > 100 mg/l
Exposure time: 72 h

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Toxicity to microorganisms : IC50 (Bacteria): > 100 mg/l

Ethanol, 2,2'-[[3-[(2-hydroxyethyl)amino]propyl]imino]bis-, N-tallow alkyl derivs.:

Toxicity to fish : LC50 (Fish): > 0.1 - 1 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 0.1 - 1 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202

Toxicity to algae : EC10 (Pseudokirchneriella subcapitata (green algae)): > 0.001 - 0.01 mg/l
Exposure time: 72 h

M-Factor (Acute aquatic toxicity) : 10

M-Factor (Chronic aquatic toxicity) : 1

12.2 Persistence and degradability

Components:

Ethanol, 2,2'-[[3-[(2-hydroxyethyl)amino]propyl]imino]bis-, N-tallow alkyl derivs.:

Biodegradability : Result: rapidly biodegradable

12.3 Bioaccumulative potential

Product:

Bioaccumulation : Remarks: Bioaccumulation is unlikely.

12.4 Mobility in soil

Product:

Distribution among environmental compartments : Remarks: No data available

12.5 Results of PBT and vPvB assessment

Product:

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher..

12.6 Other adverse effects

Product:

Additional ecological information : slightly water endangering
Do not flush into surface water or sanitary sewer system.

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Avoid subsoil penetration.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product	: In accordance with local and national regulations.
Contaminated packaging	: Dispose of as unused product.
Waste Code	: Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.

SECTION 14: Transport information

14.1 UN number

ADR	: UN 1950
RID	: UN 1950
IMDG	: UN 1950
IATA	: UN 1950

14.2 UN proper shipping name

ADR	: AEROSOLS
RID	: AEROSOLS
IMDG	: AEROSOLS
IATA	: Aerosols, flammable

14.3 Transport hazard class(es)

ADR	: 2
RID	: 2
IMDG	: 2.1
IATA	: 2.1

14.4 Packing group

ADR	
Packing group	: Not assigned by regulation
Classification Code	: 5F
Labels	: 2.1
Tunnel restriction code	: (D)
RID	
Packing group	: Not assigned by regulation
Classification Code	: 5F
Hazard Identification Number	: 23
Labels	: 2.1
IMDG	

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Packing group	:	Not assigned by regulation
Labels	:	2.1
EmS Code	:	F-D, S-U
Remarks	:	<p>"IMDG-Code segregation group not applicable"., Protected from sources of heat., For AEROSOLS with a maximum capacity of 1 litre: Category A. For AEROSOLS with a capacity above 1 litre: Category B. For WASTE AEROSOLS: Category C, Clear of living quarters., For AEROSOLS with a maximum capacity of 1 litre: Segregation as for class 9. Stow "separated from" class 1 except for division 1.4. For AEROSOLS with a capacity above 1 litre: Segregation as for the appropriate subdivision of class 2. For WASTE AEROSOLS: Segregation as for the appropriate subdivision of class 2.</p> <p>"IMDG-Code segregation group not applicable"., Protected from sources of heat., For AEROSOLS with a maximum capacity of 1 litre: Category A. For AEROSOLS with a capacity above 1 litre: Category B. For WASTE AEROSOLS: Category C, Clear of living quarters., For AEROSOLS with a maximum capacity of 1 litre: Segregation as for class 9. Stow "separated from" class 1 except for division 1.4. For AEROSOLS with a capacity above 1 litre: Segregation as for the appropriate subdivision of class 2. For WASTE AEROSOLS: Segregation as for the appropriate subdivision of class 2.</p> <p>"IMDG-Code segregation group not applicable"., Protected from sources of heat., For AEROSOLS with a maximum capacity of 1 litre: Category A. For AEROSOLS with a capacity above 1 litre: Category B. For WASTE AEROSOLS: Category C, Clear of living quarters., For AEROSOLS with a maximum capacity of 1 litre: Segregation as for class 9. Stow "separated from" class 1 except for division 1.4. For AEROSOLS with a capacity above 1 litre: Segregation as for the appropriate subdivision of class 2. For WASTE AEROSOLS: Segregation as for the appropriate subdivision of class 2.</p> <p>"IMDG-Code segregation group not applicable"., Protected from sources of heat., For AEROSOLS with a maximum capacity of 1 litre: Category A. For AEROSOLS with a capacity above 1 litre: Category B. For WASTE AEROSOLS: Category C, Clear of living quarters., For AEROSOLS with a maximum capacity of 1 litre: Segregation as for class 9. Stow "separated from" class 1 except for division 1.4. For AEROSOLS with a capacity above 1 litre: Segregation as for the appropriate subdivision of class 2. For WASTE AEROSOLS: Segregation as for the appropriate subdivision of class 2.</p> <p>"IMDG-Code segregation group not applicable"., Protected from sources of heat., For AEROSOLS with a maximum capacity of 1 litre: Category A. For AEROSOLS with a capacity above 1 litre: Category B. For WASTE AEROSOLS: Category C, Clear of living quarters., For AEROSOLS with a maximum capacity of 1 litre: Segregation as for class 9. Stow "separated from" class 1 except for division 1.4. For AEROSOLS with a capacity above 1 litre: Segregation as for the appropriate subdivision of class 2. For WASTE AEROSOLS: Segregation as for the appropriate subdivision of class 2.</p>

Chemetall (now part of BASF Group) Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

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from sources of heat., For AEROSOLS with a maximum capacity of 1 litre: Category A. For AEROSOLS with a capacity above 1 litre: Category B. For WASTE AEROSOLS: Category C, Clear of living quarters., For AEROSOLS with a maximum capacity of 1 litre: Segregation as for class 9. Stow "separated from" class 1 except for division 1.4. For AEROSOLS with a capacity above 1 litre: Segregation as for the appropriate subdivision of class 2. For WASTE AEROSOLS: Segregation as for the appropriate subdivision of class 2.

"IMDG-Code segregation group not applicable", Protected from sources of heat., For AEROSOLS with a maximum capacity of 1 litre: Category A. For AEROSOLS with a capacity above 1 litre: Category B. For WASTE AEROSOLS: Category C, Clear of living quarters., For AEROSOLS with a maximum capacity of 1 litre: Segregation as for class 9. Stow "separated from" class 1 except for division 1.4. For AEROSOLS with a capacity above 1 litre: Segregation as for the appropriate subdivision of class 2. For WASTE AEROSOLS: Segregation as for the appropriate subdivision of class 2.

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IATA (Cargo)

Packing instruction (cargo aircraft)	:	203
Packing instruction (LQ)	:	Y203
Packing group	:	Not assigned by regulation
Labels	:	Flammable gas

IATA (Passenger)

Packing instruction (passenger aircraft)	:	203
Packing instruction (LQ)	:	Y203
Packing group	:	Not assigned by regulation
Labels	:	Flammable gas

14.5 Environmental hazards

ADR

Environmentally hazardous	:	no
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RID

Environmentally hazardous	:	no
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IMDG

Marine pollutant	:	no
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14.6 Special precautions for user

Refer to protective measures listed in sections 7 and 8.

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

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals : Not applicable

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). : Not applicable

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer : Not applicable

Regulation (EC) No 850/2004 on persistent organic pollutants : Not applicable

Volatile organic compounds : Directive 1999/13/EC on the limitation of emissions of volatile organic compounds
Volatile organic compounds (VOC) content: 94.84 %

Other regulations : The product is classified and labelled in accordance with EC directives or respective national laws.
Regional or national implementations of GHS may not implement all hazard classes and categories.

Classification and labelling according to Directive 75/324/EEC.

15.2 Chemical safety assessment

For a mixture it is not mandatory to include an exposure scenario in the material safety data sheet. The necessary safety - related information is stated in the first 16 sections.

SECTION 16: Other information

Full text of H-Statements

H220	: Extremely flammable gas.
H225	: Highly flammable liquid and vapour.
H280	: Contains gas under pressure; may explode if heated.
H302	: Harmful if swallowed.
H314	: Causes severe skin burns and eye damage.
H319	: Causes serious eye irritation.
H336	: May cause drowsiness or dizziness.
H372	: Causes damage to organs through prolonged or repeated exposure if swallowed.
H400	: Very toxic to aquatic life.
H410	: Very toxic to aquatic life with long lasting effects.

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Full text of other abbreviations

Acute Tox.	: Acute toxicity
Aquatic Acute	: Acute aquatic toxicity
Aquatic Chronic	: Chronic aquatic toxicity
Eye Irrit.	: Eye irritation
Flam. Gas	: Flammable gases
Flam. Liq.	: Flammable liquids
Press. Gas	: Gases under pressure
Skin Corr.	: Skin corrosion
STOT RE	: Specific target organ toxicity - repeated exposure
STOT SE	: Specific target organ toxicity - single exposure

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

Other information :

GB / EN

If you have any queries relating to this MSDS, its contents or any other product safety related questions, please write to the following e-mail address: sds.global-chemetall@basf.com

The content of this Safety Data Sheet (SDS) is based on an existing document from an acquired company with adaptations to Section I. The data is currently under validation.

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The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. This safety data sheet is neither a Certificate of Analysis (CoA) nor technical data sheet and shall not be mistaken for a specification agreement. Identified uses in this safety data sheet do neither represent an agreement on the corresponding contractual quality of the substance/mixture nor a contractually designated use. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.