

SECTION 1: Identification

1.1. Identification

Product form	: Mixture
Trade name	: Campine N,MT,LT,Z,CS,CD,CK,CB,XP,XP-S wetted + DIDP, DINP, DOTP, DINCH, DPHP, TOTM, water, H2ODisp, linplast, PP(Polymeric plasticizer), DA(Dispersing agent), LCCP, FA(Flow &FR additive) or min. oil
Product code	: See Certificate of Analyses (US)

1.2. Recommended use and restrictions on use

Use of the substance/mixture	: Flame retardant Formulation and re-packaging of diantimony trioxide Formulation of diantimony trioxide in preparations for flame retardant productions Formulation / Industrial use of diantimony trioxide in the production of glass, enamels, functional ceramics and semi-conductors Formulation of diantimony trioxide in the production of pigments, paints, coatings, ceramics, brake pads and production and formulation of fine chemicals Use of diantimony trioxide in PET (films/fibres, resin) production Industrial use of diantimony trioxide in the production of flame retarded textiles Industrial use of diantimony trioxide in the plastics, rubber industry and containing wood adhesives. Industrial use of diantimony trioxide in the production of pigments, paints, coatings, ceramics and production and formulation of fine chemicals Industrial use of diantimony trioxide in the manufacture of brake pads Professional uses of flame retarded flexible sealing materials Professional uses of diantimony trioxide containing paints
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1.3. Supplier

Manufacturer

Campine NV
Nijverheidsstraat 2
2340 - Belgium
T +32(0)14 60 15 11
regulations@campine.com - www.campine.com
Contact: Luc De Vrij

1.4. Emergency telephone number

Emergency number	: Within Europe https://poisoncentres.echa.europa.eu/home . Within USA and Canada: Chemtrec 1-800-262-8200. For emergency calls only. Antigifcentrum: 070.245.245
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SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Carcinogenicity Category 2

H351

Suspected of causing cancer

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US)

:



Signal word (GHS US)

: Warning

Hazard statements (GHS US)

: H351 - Suspected of causing cancer

Precautionary statements (GHS US)

: P201 - Obtain special instructions before use.

P202 - Do not handle until all safety precautions have been read and understood.

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

P308+P313 - If exposed or concerned: Get medical advice/attention.

P405 - Store locked up.

P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS US classification
antimony trioxide	CAS-No.: 1309-64-4	96 – 100	Carc. 2, H351
Wetting agent	-		Not classified

Full text of hazard classes and H-statements : see section 16

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SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general	: IF exposed or concerned: Get medical advice/attention. Take off all contaminated clothing. First-aiders should wear suitable personal protective equipment (see section 8) in case of insufficient ventilation or possible skin or eye contact. Treat symptomatically.
First-aid measures after inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Give artificial respiration if necessary. Get medical advice/attention.
First-aid measures after skin contact	: Remove immediately contaminated clothing. Wash skin thoroughly with mild soap and water. In all cases of doubt, or when symptoms persist, seek medical attention.
First-aid measures after eye contact	: Rinse immediately with plenty of water (for at least 15 minutes). Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention.
First-aid measures after ingestion	: If swallowed, rinse mouth with water (only if the person is conscious). Do not induce vomiting without medical advice. Get immediate medical advice/attention.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation	: Dust of the product, if present, may cause respiratory irritation after an excessive inhalation exposure. Cough. Headache. Nausea. Sore throat. Vomiting.
Symptoms/effects after skin contact	: May be irritating. Redness. Pain.
Symptoms/effects after eye contact	: Dust from this product may cause eye irritation. Redness. Pain.
Symptoms/effects after ingestion	: May cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Chronic symptoms	: Suspected of causing cancer (Inhalation). May cause damage to organs (lungs) through prolonged or repeated exposure.

4.3. Immediate medical attention and special treatment, if necessary

Not applicable.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	: Use extinguishing media appropriate for surrounding fire. Carbon dioxide (CO2). extinguishing powder. Water spray. For large fire: Alcohol-resistant foam. Water spray.
Unsuitable extinguishing media	: Strong water jet.

5.2. Specific hazards arising from the chemical

Fire hazard	: Not flammable.
Explosion hazard	: Avoid dust formation.
Hazardous decomposition products in case of fire	: Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting	: Wear a self contained breathing apparatus. Wear recommended personal protective equipment. Concerning personal protective equipment to use, see item 8.
Other information	: Do not dispose of fire-fighting water in the environment. Dispose of fire debris and contaminated firefighting media in accordance with official regulations.

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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Evacuate area. Keep upwind. Avoid dust formation. Ensure adequate ventilation. High risk of slipping if leaked/spilled product is not cleaned up. Keep unprotected persons away.

6.1.1. For non-emergency personnel

Protective equipment : Avoid breathing dust. Avoid contact with skin, eyes, and clothing - wear suitable protective equipment (see section 8). See: Exposure controls and personal protection.

6.1.2. For emergency responders

Protective equipment : Avoid breathing dust. Avoid contact with skin, eyes, and clothing - wear suitable protective equipment (see section 8). See: Exposure controls and personal protection.

6.2. Environmental precautions

Do not allow to enter drains or water courses. Dispose in a safe manner in accordance with local/national regulations.

6.3. Methods and material for containment and cleaning up

For containment : In any case avoid dust formation.
Methods for cleaning up : Avoid dust formation. Take up mechanically (sweeping, shoveling) and collect in suitable container for disposal. Collect all waste in suitable and labeled containers and dispose according to local legislation. Ventilate area. Wash contaminated area with large amounts of water.

6.4. Reference to other sections

For more information on exposure controls/personal protection or disposal considerations, check section 8 and 13 of this safety data sheet.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Ensure good ventilation of the work station. Avoid dust formation. Do not breathe dust. Avoid contact with skin, eyes and clothing. Wear suitable personal protective equipment (see section 8). Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take any precaution to avoid mixing with Incompatible materials.
Hygiene measures : General occupational hygiene measures are required to ensure a safe handling of the substance. These measures involve good personal and housekeeping practices (i.e. regular cleaning with suitable cleaning devices), no eating, drinking and smoking at the workplace and wearing standard working clothes and shoes unless otherwise stated. Wash hands after use. Remove contaminated clothing and protective equipment before entering eating areas. Shower and change clothes at end of work shift. Do not wear contaminated clothing at home. Do not blow dust off with compressed air.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Take precautionary measures against static discharges.
Storage conditions : Keep container tightly closed. Store in dry, cool, well-ventilated area.
Incompatible materials : Hydrogen. reducing agents. Strong acids/bases.
Packaging materials : Store in original container.

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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No additional information available

antimony trioxide (1309-64-4)

USA - OSHA - Occupational Exposure Limits

OSHA PEL (TWA) [1]	0.5 mg/m ³
Limit value category (OSHA)	TLV-TWA value Sb: 0.5 mg/m ³ .

USA - NIOSH - Occupational Exposure Limits

NIOSH REL (TWA)	0.5 mg/m ³ as Sb
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Wetting agent

No additional information available

Additional information : Monitoring methods :
Personal monitoring
Atmospheric monitoring at regular intervals

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station. Avoid dust formation. Any deposit of dust which cannot be avoided must be regularly removed using preferably appropriate industrial vacuum cleaners or central vacuum systems. Waste air is to be released into the atmosphere only when it has passed through suitable dust separators. Waste water generated during the production process or cleaning operations should be collected and should preferably be treated in an on-site waste water treatment plant which ensures efficient removal of antimony.

Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Dust production: dust mask with filter type P3. Gloves. Protective goggles. Face shield.

Hand protection:

Wear suitable gloves. Chemical resistant gloves (according to European standard NF EN 374 or equivalent). Any dust-tight material (e.g. rubber-dipped cotton, rubber, nitrile, leather) suitable for the type of work (e.g. considering mechanical stress) could be used as material for gloves protecting for exposure to ATO, since ATO is a non-corrosive inorganic substance. Breakthrough times are not relevant because corrosion and diffusion are excluded by the nature of the substance. Gloves should be changed when damaged or according to manufacturer's instructions whatever is the earlier.

Eye protection:

Wear tight fitting safety glasses or facial screen. NBN EN 166:2002 is recommended.

Skin and body protection:

Wear suitable protective clothing. Dust impervious protective suit

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Respiratory protection:

Wear respiratory protection. Dust production: dust mask with filter type P3 (EN 149). Half-mask (EN 140). Full face mask (EN 136)

Personal protective equipment symbol(s):



Other information:

Do not eat, drink or smoke during use. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Solid (various forms). white. Powder.
Color	: white
Odor	: Mixture contains one or more component(s) which have the following odour:
Odor threshold	: No data available
pH	: No data available
Melting point	: 656 °C
Freezing point	: No data available
Boiling point	: 1425 °C
Flash point	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: Non-explosive.
Oxidizing properties	: Non-oxidising substance.

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

None under normal use.

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10.2. Chemical stability

Stable under normal conditions of use.

10.3. Possibility of hazardous reactions

None under normal use. Reaction with H--equivalents releases antimony hydride (stibine, SbH₃).

10.4. Conditions to avoid

Avoid dust formation. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Reference to other sections : 7.2. See section 7.1 Precautions for safe handling.

10.5. Incompatible materials

Strong acids/bases. Reducing agents. Hydrogen. See section 7.1 Precautions for safe handling.

10.6. Hazardous decomposition products

Does not decompose if used as intended. Reference to other sections : 5.2.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

antimony trioxide (1309-64-4)	
LD50 oral rat	> 20000 mg/kg (Fleming, 1938; Gross et al, 1955; Weil et al, 1987)
LD50 dermal rabbit	> 8300 mg/kg (Gross et al, 1955)
LC50 inhalation rat (mg/l)	5200 mg/m ³ (Leuschner, 2006)

Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Suspected of causing cancer.

antimony trioxide (1309-64-4)	
IARC group	2B - Possibly carcinogenic to humans
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified

antimony trioxide (1309-64-4)	
NOAEL (oral,rat,90 days)	1686 mg/kg bodyweight/day (Hext et al, 1999)
Aspiration hazard	: Not classified
Viscosity, kinematic	: No data available
Symptoms/effects after inhalation	: Dust of the product, if present, may cause respiratory irritation after an excessive inhalation exposure. Cough. Headache. Nausea. Sore throat. Vomiting.
Symptoms/effects after skin contact	: May be irritating. Redness. Pain.

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Symptoms/effects after eye contact	: Dust from this product may cause eye irritation. Redness. Pain.
Symptoms/effects after ingestion	: May cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Chronic symptoms	: Suspected of causing cancer (Inhalation). May cause damage to organs (lungs) through prolonged or repeated exposure.

SECTION 12: Ecological information

12.1. Toxicity

antimony trioxide (1309-64-4)	
LC50 - Fish [1]	< 6.9 mg/l Marine fish [Pagrus major], 96h (Takayanagi, 2001)
LC50 - Other aquatic organisms [1]	1.77 mg/l Invertebrates [Chlorohydra viridissimus], 96h (TAI, 1990)
LC50 - Fish [2]	14.4 mg/l Freshwater fish [Pimephales promelas], 96h (Brooke et al, 1986)
ErC50 algae	> 36.6 mg/l [Pseudokirchneriella subcapitata], 72h (Heijerick et al, 2004)
ErC50 other aquatic plants	> 25.5 mg/l [Lemna minor], 4d (Brooke et al, 1986)
NOEC (chronic)	1.74 mg/l Invertebrates [Daphnia magna], 21d (Heijerick et al, 2003)
NOEC chronic fish	1.13 mg/l [Pimephales promelas], 28d (Kimball, 1987)
NOEC chronic algae	2.11 mg/l [Pseudokirchneriella subcapitata], 72h (Heijerick et al, 2004)
Additional ecotox information	For an overview of PNECs, check section 8.1.2 and for more information on how the environmental classification was derived, contact your supplier.

12.2. Persistence and degradability

antimony trioxide (1309-64-4)	
Persistence and degradability	Whereas antimony formally meets the criterion for persistence based on the absence of any degradation, this criterion is considered not to be applicable to inorganic elements. In addition, under conditions of a standard EUSES lake and the median partition coefficient for suspended matter, antimony meets the criteria for rapid removal from the water column.

12.3. Bioaccumulative potential

antimony trioxide (1309-64-4)	
Bioaccumulative potential	Antimony does not meet the criteria for bioaccumulation: a BCF for aquatic organisms of 40 and a BSAF of 1 for earthworms are derived, and are all much lower than the threshold of 2,000 l/kg. Also, there is evidence to support that antimony does not biomagnify in the food chain. Therefore, antimony is not considered bioaccumulative (B) or very bioaccumulative (vB) based on the definitive criteria.

12.4. Mobility in soil

antimony trioxide (1309-64-4)	
Mobility in soil	2.07 log Kp

12.5. Other adverse effects

No additional information available

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SECTION 13: Disposal considerations

13.1. Disposal methods

Additional information	: Recycling is preferred to disposal or incineration. If recovery is not possible: Dispose as hazardous waste. Dispose in a safe manner in accordance with local/national regulations.
Ecology - waste materials	: Appropriate waste codes include in manufacture and industrial use scenarios of industrial waste (hazardous and non-hazardous): 06 05 02; 06 05 03; 19 03 05; 19 03 06; 10 08 03; 10 08 04; 10 08 01; 15 01 02; 15 01 06 Appropriate waste codes include in professional, consumer, service life and end of life scenarios: 20 01 01 till 20 01 07, 20 01 40, 20 03 01.

SECTION 14: Transport information

In accordance with Department of Transport / Transportation of Dangerous Goods / IMDG / IATA

14.1. UN number

Not regulated for transport

14.2. UN proper shipping name

Proper Shipping Name (DOT)	: Not applicable
Proper Shipping Name (TDG)	: Not applicable
Proper Shipping Name (IMDG)	: Not applicable
Proper Shipping Name (IATA)	: Not applicable

14.3. Transport hazard class(es)

DOT	
Transport hazard class(es) (DOT)	: Not applicable
TDG	
Transport hazard class(es) (TDG)	: Not applicable
IMDG	
Transport hazard class(es) (IMDG)	: Not applicable
IATA	
Transport hazard class(es) (IATA)	: Not applicable

14.4. Packing group

Packing group (DOT)	: Not applicable
Packing group (TDG)	: Not applicable
Packing group (IMDG)	: Not applicable
Packing group (IATA)	: Not applicable

14.5. Environmental hazards

Other information	: No supplementary information available.
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14.6. Special precautions for user

DOT

No data available

TDG

No data available

IMDG

No data available

IATA

No data available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

antimony trioxide (1309-64-4)

Listed on the United States TSCA (Toxic Substances Control Act) inventory
Subject to reporting requirements of United States SARA Section 313

CERCLA RQ

1000 lb

15.2. International regulations

CANADA

antimony trioxide (1309-64-4)

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

EU-Regulations

No additional information available

National regulations

antimony trioxide (1309-64-4)

Listed on IARC (International Agency for Research on Cancer)

15.3. US State regulations

antimony trioxide (1309-64-4)

U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)	Maximum allowable dose level (MADL)
Yes	No	No	No		

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SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Full text of H-phrases

H351	Suspected of causing cancer
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Safety Data Sheet (SDS), USA

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.