

Comet Ag-Cu-Zn-Sn

Version 2.9

IR

SDS Number: 300000001219

Revision Date: 04.05.2018

1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Comet Ag-Cu-Zn-Sn

Trade name : BrazeTec CoMet 5600U, BrazeTec CoMet 5507U, BrazeTec CoMet 5507SIU, BrazeTec CoMet 4576U, BrazeTec CoMet 4576SIU, BrazeTec CoMet 4076U, BrazeTec CoMet 3476U, BrazeTec CoMet 3476SIU, BrazeTec CoMet 3076U, BrazeTec CoMet 2076U.

Product code : 300000001219

Manufacturer or supplier's details

Company : SAXONIA Technical Materials GmbH

Address : Rodenbacher Chaussee 4
63457 Hanau
Germany

Telephone : +49 6181 59-5305

E-mail address : info.ipds@umicore.com

Poison Center

Telephone : 09646 (NATIONAL CALLERS)

Hours of operation : 8:00-22:00, SATURDAY-FRIDAY

Supplier

Emergency telephone number : For transport in Europe, Central- and South America, Israel and Africa (Non-Arabic speaking countries): +32 3 213 15 70
For transport in the Middle East (Israel excluded) & Arabic speaking Africa: +32 3 213 33 79
For transport in the USA and Canada: 1-877 986 4267
For transport in Asian and the Pacific (China excluded): +65 62 64 78 36
For transport in China: (+86) 400 88 71 190

Hours of operation : This telephone number is available 24 hours per day, 7 days per week.

Recommended use of the chemical and restrictions on use

Recommended use : brazing

2. HAZARDS IDENTIFICATION

GHS Classification

Acute toxicity (Inhalation) : Category 5

Serious eye damage/eye irri- : Category 2A

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tation

Reproductive toxicity : Category 2

GHS label elements

Hazard pictograms :



Signal word : Warning

Hazard statements : H319 Causes serious eye irritation.
H333 May be harmful if inhaled.
H361 Suspected of damaging fertility or the unborn child.

Precautionary statements : **Prevention:**
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P264 Wash skin thoroughly after handling.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:
P304 + P312 IF INHALED: Call a POISON CENTER/ doctor if you feel unwell.
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.
P337 + P313 If eye irritation persists: Get medical advice/ attention.

Storage:
P405 Store locked up.

Disposal:
P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards which do not result in classification

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

Chemical name	CAS-No.	Concentration (% w/w)
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Potassium tetrafluoroborate	14075-53-7	<= 90
boron potassium oxide(b4k2o7), tetrahydrate	12045-78-2	<= 50
potassium metaborate	13709-94-9	<= 25

4. FIRST AID MEASURES

- General advice : Move out of dangerous area.
Show this safety data sheet to the doctor in attendance.
Do not leave the victim unattended.
- If inhaled : Move to fresh air.
Consult a physician after significant exposure.
If unconscious, place in recovery position and get medical attention immediately.
- In case of skin contact : If on clothes, remove clothes.
- In case of eye contact : Remove contact lenses.
In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.
- If swallowed : Induce vomiting immediately and call a physician.
Keep respiratory tract clear.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.
Take victim immediately to hospital.
- Most important symptoms and effects, both acute and delayed : Inhalation may provoke the following symptoms:
Shortness of breath
Asthma
Eye contact
Excessive lachrymation

5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Unsuitable extinguishing media : High volume water jet
- Specific hazards during fire-fighting : Do not allow run-off from fire fighting to enter drains or water courses.
- Hazardous combustion products : Fluorine compounds
Boranes
Boron oxides
- Specific extinguishing method : Collect contaminated fire extinguishing water separately. This

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ods must not be discharged into drains.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Special protective equipment : Wear self-contained breathing apparatus for firefighting if necessary.
for firefighters

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.
Avoid dust formation.
Avoid breathing dust.
Ensure adequate ventilation.

Environmental precautions : Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities.

Methods and materials for containment and cleaning up : Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Advice on protection against fire and explosion : Avoid dust formation.
Provide appropriate exhaust ventilation at places where dust is formed.

Advice on safe handling : Avoid formation of respirable particles.
Do not breathe vapours/dust.
Avoid exposure - obtain special instructions before use.
Avoid contact with skin and eyes.
For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
Provide sufficient air exchange and/or exhaust in work rooms.
Dispose of rinse water in accordance with local and national regulations.

Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place.
Observe label precautions.
Electrical installations / working materials must comply with the technological safety standards.
To maintain product quality, do not store in heat or direct sunlight.

Further information on storage stability : Keep in a dry place.

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Engineering measures : Handle only in a place equipped with local exhaust (or other appropriate exhaust).

Personal protective equipment

Respiratory protection : In the case of dust or aerosol formation use respirator with an approved filter.
When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Hand protection

Material : Nitrile rubber
Break through time : > 240 min
Glove thickness : > 0.2 mm

Eye protection : Safety glasses with side-shields conforming to EN166

Skin and body protection : Dust impervious protective suit

Hygiene measures : When using do not eat or drink.
When using do not smoke.
Wash hands before breaks and at the end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : powder
Colour : white
Odour : odourless
pH : not determined
Melting point/range : 325 - 450 °C
Boiling point/boiling range : not determined
Flammability (solid, gas) : The product is not flammable.
Vapour pressure : not determined
Density : 1.45 - 1.9 g/cm³
Solubility(ies)
Water solubility : not determined
Auto-ignition temperature : not determined

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10. STABILITY AND REACTIVITY

Reactivity	:	Stable
Chemical stability	:	No decomposition if stored and applied as directed.
Possibility of hazardous reactions	:	No decomposition if stored and applied as directed.
Conditions to avoid	:	None known.
Incompatible materials	:	Acids Oxidizing agents
Hazardous decomposition products	:	No decomposition if stored normally.

11. TOXICOLOGICAL INFORMATION**Acute toxicity****Product:**

Acute oral toxicity	:	Remarks: No data available
Acute inhalation toxicity	:	Remarks: No data available
Acute dermal toxicity	:	Remarks: No data available

Components:**Potassium tetrafluoroborate:**

Acute oral toxicity	:	LD50 (Rat): 5,854 mg/kg
Acute inhalation toxicity	:	LC50 (Rat, male and female): 5.3 mg/l Exposure time: 4 h Test atmosphere: dust/mist Method: OECD Test Guideline 436 GLP: yes
Acute dermal toxicity	:	Assessment: The substance or mixture has no acute dermal toxicity Remarks: data waiving in REACH dossier

boron potassium oxide(b4k2o7), tetrahydrate:

Acute oral toxicity	:	Assessment: No data available
Acute inhalation toxicity	:	 Remarks: No data available
Acute dermal toxicity	:	

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Remarks: No data available

potassium metaborate:

Acute oral toxicity : Assessment: No data available

Acute inhalation toxicity : Assessment: No data available

Acute dermal toxicity : Assessment: No data available

Skin corrosion/irritation

Product:

Remarks: No data available

Components:

Potassium tetrafluoroborate:

Species: Rabbit

Exposure time: 4 h

Method: OECD Test Guideline 404

Result: No skin irritation

GLP: yes

Serious eye damage/eye irritation

Product:

Remarks: No data available

Components:

Potassium tetrafluoroborate:

Species: Rabbit

Method: OECD Test Guideline 405

Result: No eye irritation

GLP: yes

potassium metaborate:

Result: Eye irritation

Respiratory or skin sensitisation

Product:

Remarks: No data available

Germ cell mutagenicity

Product:

Genotoxicity in vitro : Remarks: No data available

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Carcinogenicity

Product:

Remarks: No data available

Reproductive toxicity

Product:

Effects on fertility : Remarks: No data available

Components:

boron potassium oxide(b4k2o7), tetrahydrate:

Reproductive toxicity - Assessment : Some evidence of adverse effects on development, based on animal experiments.

potassium metaborate:

Reproductive toxicity - Assessment : Suspected human reproductive toxicant

STOT - single exposure

Product:

Remarks: No data available

STOT - repeated exposure

Product:

Remarks: No data available

Further information

Product:

Remarks: No data available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

Potassium tetrafluoroborate:

Toxicity to fish : LC50 (Fish): 760 mg/l
Exposure time: 96 h

boron potassium oxide(b4k2o7), tetrahydrate:

Ecotoxicology Assessment

Acute aquatic toxicity : No data available

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potassium metaborate:

Ecotoxicology Assessment

Acute aquatic toxicity : No data available

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects

Product:

Additional ecological information : No data available

13. DISPOSAL CONSIDERATIONS

Disposal methods

- Waste from residues : Do not dispose of waste into sewer.
Dispose of in accordance with the European Directives on waste and hazardous waste.
In accordance with local and national regulations.
Do not contaminate ponds, waterways or ditches with chemical or used container.
According to the European Waste Catalogue, Waste Codes are not product specific, but application specific.
Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.
Send to a licensed waste management company.
- Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Do not re-use empty containers.

14. TRANSPORT INFORMATION

International Regulations

UNRTDG

Not regulated as a dangerous good

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

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

Not applicable for product as supplied.

Special precautions for user

Not applicable

15. REGULATORY INFORMATION

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

The components of this product are reported in the following inventories:

CH INV	: Not in compliance with the inventory
DSL	: This product contains the following components that are not on the Canadian DSL nor NDSL.
AICS	: On the inventory, or in compliance with the inventory
NZIoC	: Not in compliance with the inventory
ENCS	: Not in compliance with the inventory
ISHL	: Not in compliance with the inventory
KECI	: Not in compliance with the inventory
PICCS	: Not in compliance with the inventory
IECSC	: On the inventory, or in compliance with the inventory
TCSI	: On the inventory, or in compliance with the inventory
TSCA	: Not On TSCA Inventory

16. OTHER INFORMATION

Full text of other abbreviations

AICS - Australian Inventory of Chemical Substances; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; CPR - Controlled Products Regulations; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); 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; ERG - Emergency Response Guide; 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 Dan-

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gerous 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; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; 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; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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