SAFETY DATA SHEET

Jetfluid SB 11002

SECTION 1. IDENTIFICATION

Product name : Jetfluid SB 11002
Product code : 022643SK0

Manufacturer or supplier’s details
Company name of supplier : ECKART GmbH
Address : Guentersthal 4
Hartenstein 91235
Telephone : +499152777008
Telefax : +499152777008
Emergency telephone number : CHEMTREC: 800-424-9300
CHEMTREC: 1-703-527-3387 (International)
GBK Gefahrgut Buero GmbH, Ingelheim, Germany:
From outside US: (001) 352-323-3500
(First call in English, response in your language is possible)
US & Canada (toll free): 1-800-5355-053

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with 29 CFR 1910.1200
Flammable liquids : Category 4
Acute toxicity (Oral) : Category 4
Acute toxicity (Inhalation) : Category 4
Acute toxicity (Dermal) : Category 4

GHS label elements
Hazard pictograms :

Signal word : Warning
HAZARD STATEMENTS

H227 Combustible liquid.
H302 + H312 + H332 Harmful if swallowed, in contact with skin or if inhaled.

PRECAUTIONARY STATEMENTS

Prevention:
P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/ eye protection/ face protection.

Response:
P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.
P302 + P352 + P312 IF ON SKIN: Wash with plenty of water. Call a POISON CENTER/doctor if you feel unwell.
P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.
P363 Wash contaminated clothing before reuse.
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

Storage:
P403 + P235 Store in a well-ventilated place. Keep cool.

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

OTHER HAZARDS
None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No.</th>
<th>Concentration (% w/w)</th>
</tr>
</thead>
</table>

SECTION 4. FIRST AID MEASURES

General advice

Move out of dangerous area.
Show this safety data sheet to the doctor in attendance.

If inhaled

If unconscious, place in recovery position and seek medical advice.
If symptoms persist, call a physician.

In case of skin contact

If on skin, rinse well with water.
If on clothes, remove clothes.

In case of eye contact

Flush eyes with water as a precaution.
Remove contact lenses.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.

If swallowed

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.

Most important symptoms and effects, both acute and delayed

Harmful if swallowed, in contact with skin or if inhaled.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media

Carbon dioxide (CO2)

Unsuitable extinguishing media

High volume water jet

Further information

For safety reasons in case of fire, cans should be stored separately in closed containments.
Use a water spray to cool fully closed containers.

Special protective equipment for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES
Environmental precautions : Prevent further leakage or spillage if safe to do so.

Methods and materials for containment and cleaning up : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion : Do not spray on a naked flame or any incandescent material. Keep away from open flames, hot surfaces and sources of ignition.

Advice on safe handling : Avoid formation of aerosol. Do not breathe vapours/dust. 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 : No smoking. Keep in a well-ventilated place. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards.

Further information on storage stability : No decomposition if stored and applied as directed.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Value type (Form of exposure)</th>
<th>Control parameters / Permissible concentration</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethanol, 2-butoxy-, 1-acetate</td>
<td>112-07-2</td>
<td>TWA</td>
<td>20 ppm</td>
<td>ACGIH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>5 ppm 33 mg/m3</td>
<td>NIOSH REL</td>
</tr>
</tbody>
</table>
SAFETY DATA SHEET
Jetfluid SB 11002

Ethanol, 2-butoxy-1-acetate 112-07-2 TWA ACGIH

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<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>TWA</td>
<td>5 ppm</td>
<td>NIOSH REL</td>
</tr>
<tr>
<td>Odour</td>
<td></td>
<td>33 mg/m3</td>
<td></td>
</tr>
</tbody>
</table>

**Personal protective equipment**

Hand protection

Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection : Tightly fitting safety goggles

Skin and body protection : Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures : Wash hands before breaks and at the end of workday.

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance : liquid

Colour : colourless

Odour : No data available

Odour Threshold : No data available

pH : No data available

Melting point/freezing point : No data available

Boiling point/boiling range : ca. 190 °C

Flash point : 78 °C

Evaporation rate : No data available

Flammability (solid, gas) : No data available

Upper explosion limit / Upper flammability limit : No data available

Lower explosion limit / Lower flammability limit : No data available

Vapour pressure : No data available

Relative density : No data available

Density : ca. 0.94 g/cm3 (20 °C)

Solubility(ies) : No data available

Partition coefficient: n-octanol/water : log Pow: 1.51 (25 °C)

Auto-ignition temperature : 280 °C
Decomposition temperature : No data available
Viscosity
  Viscosity, dynamic : 1.85 mPa.s (20 °C)
  Viscosity, kinematic : 1.923 mm²/s (20 °C)

SECTION 10. STABILITY AND REACTIVITY

Reactivity : No decomposition if stored and applied as directed.
Chemical stability : No decomposition if stored and applied as directed.
Possibility of hazardous reactions : No decomposition if stored and applied as directed.
  Vapours may form explosive mixture with air.
Conditions to avoid : Heat, flames and sparks.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity
Harmful if swallowed, in contact with skin or if inhaled.

Components:
Ethanol, 2-butoxy-, 1-acetate:
Acute dermal toxicity : Acute toxicity estimate: 1,100 mg/kg
  Method: Converted acute toxicity point estimate

Skin corrosion/irritation
Not classified based on available information.

Serious eye damage/eye irritation
Not classified based on available information.

Respiratory or skin sensitisation

Skin sensitisation
Not classified based on available information.

Respiratory sensitisation
Not classified based on available information.

Germ cell mutagenicity
Not classified based on available information.
Carcinogenicity
Not classified based on available information.

<table>
<thead>
<tr>
<th>Source</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>IARC</td>
<td>No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.</td>
</tr>
<tr>
<td>OSHA</td>
<td>No component of this product present at levels greater than or equal to 0.1% is on OSHA’s list of regulated carcinogens.</td>
</tr>
<tr>
<td>NTP</td>
<td>No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.</td>
</tr>
</tbody>
</table>

Reproductive toxicity
Not classified based on available information.

STOT - single exposure
Not classified based on available information.

STOT - repeated exposure
Not classified based on available information.

Aspiration toxicity
Not classified based on available information.

Further information
Components:
Ethanol, 2-butoxy-, 1-acetate:
Remarks: No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity
No data available

Persistence and degradability
No data available

Bioaccumulative potential
No data available

Other adverse effects
No data available
Components:
Ethanol, 2-butoxy, 1-acetate:
Additional ecological information : No data available

SECTION 13. DISPOSAL CONSIDERATIONS
Disposal methods
Waste from residues : Do not dispose of waste into sewer.
Do not contaminate ponds, waterways or ditches with chemical or used container.
Send to a licensed waste management company.
In accordance with local and national regulations.

Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Do not re-use empty containers.
Do not burn, or use a cutting torch on, the empty drum.
In accordance with local and national regulations.

SECTION 14. TRANSPORT INFORMATION
International Regulations
Remarks : Not classified as dangerous in the meaning of transport regulations.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable for product as supplied.

National Regulations

SECTION 15. REGULATORY INFORMATION
EPCRA - Emergency Planning and Community Right-to-Know Act
CERCLA Reportable Quantity
This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity
This material does not contain any components with a section 304 EHS RQ.

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity
This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards : Flammable (gases, aerosols, liquids, or solids)
Acute toxicity (any route of exposure)

SARA 313: The following components are subject to reporting levels established by SARA Title III, Section 313:

Ethanol, 2-butoxy-, 1-acetate 112-07-2 >= 90 - <= 100 %

Clean Air Act

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B). The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):

Ethanol, 2-butoxy-, 1-acetate 112-07-2 100 %

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F). The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489):

Ethanol, 2-butoxy-, 1-acetate 112-07-2 100 %

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

US State Regulations

Massachusetts Right To Know

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know

Ethanol, 2-butoxy-, 1-acetate 112-07-2

California Prop. 65

WARNING: This product can expose you to chemicals including lead and cadmium, which is/are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

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

DSL: All components of this product are on the Canadian DSL

TSCA: On TSCA Inventory
TSCA list
No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

SECTION 16. OTHER INFORMATION

Full text of other abbreviations

ACGIH : USA. ACGIH Threshold Limit Values (TLV)
NIOSH REL : USA. NIOSH Recommended Exposure Limits
ACGIH / TWA : 8-hour, time-weighted average
NIOSH REL / TWA : Time-weighted average concentration for up to a 10-hour
workday during a 40-hour workweek

AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of
Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation,
and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the
German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic
Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely
Hazardous Substance; 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; HMIS - Hazardous Materials Identification System; 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; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise
Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect
Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect
Loading Rate; 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; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC)
No 1907/2006 of the European Parliament and of the Council concerning the Registration,
Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-
Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act;
SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; 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
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