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

1.1 Product identifier

Identification / trade name: Art. 51104, MULTI-TRENN, 400 ml
REACH registration number: not notifiable

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

Use of the substance / mixture:
Separating and sliding agent and lubricant, silicone-free

1.3 Details of the supplier of the safety data sheet

Supplier / Manufacturer: HWR-CHEMIE GmbH
Moosfeldstrasse 7
D-82275 Emmering

Telephone: 0049-8141-51030
Telefax: 0049-8141-510355
E-mail: info@hwr-chemie.de

E-mail (competent person): infoSDB@hwr-chemie.de
Information contact: Laboratory

1.4 Emergency phone

Emergency phone Germany: 0049-8141-51030 (only during office hours)
Emergency phone Austria: 0043 1 406 43 43 (poison information centre)

SECTION 2. Hazards identification

2.1 Classification of the substance or mixture

Regulation (EC) No 1272/2008
Flam. Aerosol 1, H222-H229; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H336; Aquatic Chronic 2, H411

2.2 Label elements

Regulation (EC) No 1272/2008

Hazard pictograms

Signal word: Danger.

Continued on next page

Hazard components for labeling

Hydrocarbons C6, isoalkane, < 5% n-hexan; 2-Propanol

Hazard statements

H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

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 Pressurized container: Do not pierce or burn, even after use.
P261 Avoid breathing spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do. Continue rinsing.
P410 + P412 Protect from sunlight. Do no expose to temperatures exceeding 50°C/ 122°F.
P501 Dispose of contents/container at hazardous or special waste collection point.

2.3 Other hazards

The substances in this mixture do not meet the PBT/vPvB criteria of REACH, annex XIII.

SECTION 3. Composition / information on ingredients

3.1 Substances

This product is a mixture.

3.2 Mixtures

Chemical characterization

Mixture of aerosol propellants, hydrocarbons, alcohols and natural oils.

Hazardous ingredients

30 - 50 % 2-Propanol, EG 200-661-7, CAS 67-63-0, Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336
20 - 30 % Hydrocarbons, C6, Isoalkane, < 5% n-Hexan, EG 931-254-9, CAS 64742-49-0,
Flam. Liq. 2, H225; Asp. Tox. 1, H304; Aqu. Chron. 2, H411; Skin Irrit. 2, H315; STOT SE 3, H336
1 - 10 % Carbon dioxide, EG 204-696-9, CAS 124-38-9, Press. Gas, H280

Additional information

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

Continued on next page

SECTION 4. First aid measures

4.1 Description of first aid measures

General informations: In case of persistent symptoms seek medical advice. Remove contaminated clothing. In case of unconsciousness place patient into stable side position for transportation. Never give fluids or induce vomiting if patient is unconscious or is having convulsions.

In case of inhalation: Provide affected person with fresh air and seek medical advice depending on the symptoms.

In case of skin contact: Contaminated, soaked clothing should be immediately removed. Wash skin thoroughly with soap and water.

In case of eye contact: Immediately wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

In case of ingestion: Rinse mouth immediately and then drink plenty of water. Do not induce vomiting. Seek medical advice at once. In case of spontaneous vomiting hold the head of the casualty low with the body in a prone position in order to avoid aspiration.

4.2 Most important symptoms and effects, both acute and delayed

Dizziness, headache. Contact with eyes may cause reddening, running eyes and smarting pain. Ingestion may result in nausea and stomach pain. Skin contact may cause irritation.

4.3 Indication of any immediate medical attention and special treatment needed

Symptomatic treatment (decontamination, vital functions), no known specific antidote.

SECTION 5. Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media: Water spray jet / alcohol resistant foam / CO2 / dry extinguishing powder

Unsuitable extinguishing media: Full water jet.

5.2 Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.
In case of fire may be liberated: carbon oxides.

5.3 Advice for fire-fighters

Cool closed containers exposed to fire with water spray jet.
Special protective equipment: Wear full protective suit with self-contained breathing apparatus.
Collect contaminated fire extinguishing water separately. Do not allow entering drains, surface water or soil.

Continued on next page

SECTION 6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid inhalation and contact with skin and eyes. Wear protection equipment.

6.2 Environmental precautions

Do not allow to enter into surface water or drains.

6.3 Methods and material for containment and cleaning up

Absorb with an absorbent material and dispose of according to local regulations.

6.4 Reference to other sections

Observe protective measures in sections 8 and disposal considerations in section 13.

SECTION 7. Handling and Storage

7.1 Precautions for safe handling

Advices on safe handling

Do not expose to temperatures exceeding 50 °C. Do not spray into eyes.
Use only in well-ventilated areas or provide local extraction.
Avoid release into the environment.
General hygiene measures:
- Eating, drinking or smoking is prohibited in areas, where work is performed.
- Wash your hands after use.
- Take off contaminated clothing and protective equipment before entering eating areas.

Precautions against fire and explosion

Flammable vapour/air-mixtures may be formed. Keep away from sources of ignition - No smoking.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed in a cool and well-ventilated place. Store locked up.
Storage compatibility and limitations according to TRGS 510 must be observed.

7.3 Specific end uses

Observe product information sheet.
eCl@ss (8.0): 30-21-22-90

Continued on next page

SECTION 8. Exposure controls / Personal protection

8.1 Control parameters

Workplace exposure limits according to TRGS 900

Substances: Propane-2-ol
Occupational exposure limit: 200 ppm, 500 mg/m³
Top limiting and exceedance factor: 2 (II)
Notes: DFG, Y

Substances: Carbon dioxide
Occupational exposure limit: 5000 ppm, 9100 mg/m³
Top limiting and exceedance factor: 2 (II)
Notes: DFG, EU

Substances: Hydrocarbon mixture, C5-C8 Aliphatics
Occupational exposure limit: 1500 mg/m³

Biological limits according to TRGS 903

Substances: Propane-2-ol
Parameters: Aceton
Biological limit value: 25 mg/l / 25 mg/l
Test material and sampling time: B b / U b

Community workplace exposure limits

Substances: Carbon dioxide
EU limits (8h): 9 000 mg/m³, 5 000 ppm
EU limits (Short-term): -

8.2 Exposure controls / Personal protection equipment

Appropriate engineering controls

See section 7. No additional measures necessary.

Personal protection equipment

Respiratory protection:	No personal respiratory protective equipment normally required.
Hand protection:	Tested gloves with breakthrough time >= 8 hours made from NBR (0.35 mm) or FKM (0.4 mm)
Eye protection:	Safety goggles
Protective clothing:	Solvent resistant protective clothing.

General health and safety measures

Respect good personal hygiene. Do not drink, eat or smoke while handling.

Environmental exposure controls

See section 6 and 7.

Continued on next page

SECTION 9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

General information

Physical state:	aerosol
Colour:	yellowish
Odour:	alcoholic
Odour threshold:	not determined
pH value (undiluted):	not applicable
Freezing point (°C):	not determined
Boiling temperature (°C):	not determined
Flashpoint (°C):	- 26
Evaporation rate:	not determined
Flammability (solid, gas):	not applicable
Lower explosion limit:	not determined
Upper explosion limit:	not determined
Vapour pressure (hPa):	5500
Vapor density:	not determined
Relative density (20 °C):	0.78
Solubility:	not mixable with water
Partition coefficient (KOW):	not determined
Autodecomposition temp.:	not determined
Decomposition temperature:	not determined
Dynamic viscosity (mPas):	not determined
Explosive properties:	Flammable vapour/air-mixtures may be formed.
Oxidizing properties:	not oxidizing

9.2 Other information

No other physical and chemical data has been recorded.

SECTION 10. Stability and Reactivity

10.1 Reactivity

Mixture of solvents, no particular reactivity expected.

10.2 Chemical stability

Stable under the specified storage conditions.

10.3 Possibility of hazardous reactions

There are expected no hazardous reactions for intended use.

10.4 Conditions to avoid

Avoid heat, direct sunlight, electrostatic discharges and sparks.
Note the information about handling and storage in section 7.

Continued on next page

10.5 Incompatible materials

Different plastics can be attacked.

10.6 Hazardous decomposition products

No hazardous decomposition products known.

SECTION 11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity

The mixture does not meet the criteria for classification.

Skin Corrosion / Irritation

Mixture is classified as irritating to the skin.

Serious Eye Damage / Irritation

Mixture is classified as irritating to the eyes.

Sensitisation

Mixture does not contain any sensitising substances.

CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)

Mixture does not contain any substances which are classified as carcinogenic, mutagenic or toxic for reproduction.

Specific target organ toxicity (single exposure)

May cause drowsiness or dizziness.

Specific target organ toxicity (repeated exposure)

Mixture does not contain any substances with specific target organ toxicity (repeated exposure).

Aspiration hazard

May be fatal if swallowed and enters airways.

SECTION 12. Ecological information

The available data refer to the substances in the mixture. The mixture as a whole has not been tested.

12.1 Toxicity

Hydrocarbons, C6, Isoalkane, < 5% n-Hexan
EC50 (48h) = 3.87 mg/l (Daphnia magna)
LC50 (48h) > 1 mg/l (Oryzias latipes)

12.2 Persistence and degradability

No further relevant information available.

12.3 Bioaccumulative potential

No further relevant information available.

Continued on next page

12.4 Mobility in soil

No further relevant information available.

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances which are identified as PBT or vPvB.

12.6 Other adverse effects

No further relevant information available.

SECTION 13. Disposal considerations

13.1 Waste treatment methods

Recommendation

Hazardous waste according to European list of wastes. Dispose of in accordance with local, official regulations.

Waste codes/waste designations according to EWC

15 01 10 (Packaging containing residues of or contaminated by hazardous substances)

Packaging

Contaminated package

Hazardous waste according to European list of wastes. Dispose of in accordance with local, official regulations. Waste code 15 01 10 (packaging containing residues of or contaminated by hazardous substances)

SECTION 14. Transport information

14.1 UN number

1950

14.2 UN Proper shipping name:

ADR / RID:

Aerosols, environmentally hazardous

IMDG-Code / ICAO-TI / IATA-DGR:

Aerosols, environmentally hazardous

14.3 Transport hazard class(es)

ADR / RID / IMDG-Code / ICAO-TI / IATA-DGR:

2 (5F)

14.4 Packing group

not applicable

14.5 Enviromental hazards

environmentally hazardous

Continued on next page

14.6 Special precautions for user

See section 6 and 8.

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

National regulations

Observe employment restrictions for young people (§ 22 JArbSchG).
Water hazard class: WGK 1 (in accordance with German regulation AwSV)
VOC content according to 31. BImSchV: 66.9 %

15.2 Chemical Safety Assessment

For this mixture a chemical safety assessment has not been carried out.

SECTION 16. Other information

Indication of changes

Revised sections: 2, 7 - 16

Hazard statements referred to in Section 2 and 3 i.a.w. Regulation (EC) No 1272/2008

Aerosol 1, H222 = Aerosols, category 1, Extremely flammable aerosol.
Flam. Liq 2, H225 = Flammable liquids, category 2, Highly flammable liquid and vapour.
Aerosol 3, H229 = Aerosols, category 3, Pressurized container: may burst if heated.
Press. Gas, H280 = Gases under pressure, Contains gas under pressure; may explode if heated.
Asp. Tox. 1, H304 = Aspiration hazard, category 1, May be fatal if swallowed and enters airways.
Skin Irrit. 2, H315 = Skin corrosion / irritation, category 2, Causes skin irritation.
Eye Irrit. 2, H319 = Eye damage / irritation, category 2, Causes serious eye irritation.
STOT SE 3, H336 = Specific target organ toxicity (single exposure), category 3, May cause drowsiness or dizziness.
Aquatic Chronic 2, H411 = Hazardous to the aquatic environment, chronic, category 2, Toxic to aquatic life with long lasting effects.

Key literature references and sources for data

REACH Regulation (EC) No. 1907/2006 last amended by Regulation (EU) 2016/2235
CLP Regulation (EC) No. 1272/2008 last amended by Regulation (EU) 2016/1179

All data were taken from the safety data sheets of our sub-suppliers, where available. Missing data were taken from the Substance Database GESTIS of the Institute for Occupational Safety and Health of the German statutory accident insurance or from the database of the European Chemicals Agency (ECHA).

Continued on next page

Legend

ABEK Filter designation
ADR European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE mix Acute Toxicity Estimates for mixtures
AVV European waste list regulation
AwSV Ordinance on systems for handling water-polluting substances
Butyl Butyl rubber
CAS (Registration number) Chemical Abstracts Service
CLP Regulation on classification, labelling and packaging of substances and mixtures
CMR Carcinogenicity, mutagenicity, reproductive toxicity
CR Chloroprene rubber
EC50 Median effective concentration
EG (Registration number) European Union
ErC50 Median effective concentration
FIFRA Federal Insecticide, Fungicide and Rodenticide Act
FKM Fluorocarbon rubber
GISCODE Labelling system of the professional associations in the construction industry
IATA-DGR International Air Transport Association - Dangerous Goods Regulations
IBC International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
ICAO-TI Technical Instructions For The Safe Transport of Dangerous Goods by Air
IMDG International Maritime Dangerous Goods
LC50 Lethal concentration of a substance leading to the death of 50% of the exposed organisms
LD50 Lethal dose of a substance that leads to death of 50% of the organisms exposed to it
MARPOL International Convention for the Prevention of Pollution from Ships
NBR Acrylonitrile butadiene rubber
NOEC No Observed Effect Concentration
NOEL No Observed Effect Level
NR Natural rubber
OECD Organisation for Economic Co-operation and Development
PBT Persistent, bioaccumulating, toxic
PET Polyethylene terephthalate
PTFE Polytetrafluoroethylene
PVC Polyvinyl chloride
REACH Regulation concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals
RID Convention concerning International Carriage by Rail
TRGS Technical Rules for Hazardous Substances
UN United Nations
US-EPA United States Environmental Protection Agency
VOC Volatile Organic Compounds
vPvB Very persistent, very bioaccumulating
WGK Water hazard class

Further information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal.

End of safety data sheet