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

1.1 Product identifier

Identification / trade name: Art. 2600, GLAWI
REACH registration number: not notifiable
UFI: 1QP8-1GMM-D704-0PTQ

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

Use of the substance / mixture:
Cleaning agent

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: 0049-8141-510350
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. Liq. 3, H226; Eye Irrit. 2, H319

2.2 Label elements

Regulation (EC) No 1272/2008

Hazard pictograms

Signal word: Warning.

Continued on next page

Hazard statements

H226 Flammable liquid and vapour.
H319 Causes serious eye irritation.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280 Wear protective gloves / protective clothing / eye protection / face protection.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313 If eye irritation persists: Get medical advice / attention.
P501 Dispose of contents/container at hazardous or special waste collection point.

Supplementary Hazard Information

EUH208 Contains Limonene. May produce an allergic reaction.

2.3 Other hazards

The substances in this mixture do not meet the PBT/vPvB criteria of REACH, annex XIII.
The substances in this mixture do not have any endocrine disrupting properties.

SECTION 3. Composition / information on ingredients

3.1 Substances

This product is a mixture.

3.2 Mixtures

Chemical characterization

Mixture of surfactants, alcohols, auxiliaries and dye in water.

Hazardous ingredients

20 - 30 % Ethanol, EG 200-578-6, CAS 64-17-5, Flam. Liq. 2, H225;
specific concentration limits: >= 50 % Eye Irrit. 2, H319
1 - 10 % 1-Methoxy-2-propanol, CAS 107-98-2, Flam. Liq. 3, H226; STOT SE 3, H336
1 - < 3 % Alcohol, C10-16, ethoxylated, propoxylated, CAS 69227-22-1, Acute Tox. 4, H302; Eye Dam. 1, H318
Specific concentration limits: <10 % Eye Irrit. 2
1 - < 3 % Alkylpolyglucoside, EG 500-220-1, CAS 68515-73-1, Skin Irrit. 2, H315; Eye Dam. 1, H318,
specific concentration limits: > 10 % Eye Dam. 1
< 0.5 % Perfume mixture, Flam. Liq. 3, H226; Asp. Tox. 1, H304; Skin Irrit. 2, H315; Skin Sens. 1, H317;
Eye Dam. 1, H318; Aquatic Chronic 1, H410

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.

Continued on next page

SECTION 6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid contact with skin and eyes. Wear protective equipment.

6.2 Environmental precautions

Large quantities of spills should be contained by. Do not allow to enter undiluted 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

Wear protective clothing. Open carefully and keep container closed when not in use.
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.
Ground/bond container and receiving equipment.
Use only spark-/explosionproof appliances in danger zones.
Take precautionary measures against static discharges.

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.
Storage compatibility and limitations according to TRGS 510 must be observed.

7.3 Specific end uses

Observe product information sheet.
eCl@ss (8.0): 30-02-14-03 / GISCODE: GGL10

Continued on next page

SECTION 8. Exposure controls / Personal protection

8.1 Control parameters

Workplace exposure limits according to TRGS 900

Substances: Ethanol
Occupational exposure limit: 200 ppm, 380 mg/m³
Top limiting and exceedance factor: 4 (II)
Notes: DFG, Y

Substances: 1-Methoxy-2-propanol
Occupational exposure limit: 100 ppm, 370 mg/m³
Top limiting and exceedance factor: 2 (I)
Notes: DFG, Y, EU

Biological limits according to TRGS 903

Substances: 1-Methoxy-2-propanol
Parameters: 1-Methoxypropan-2-ol
Biological limit value: 15 mg/l
Test material and sampling time: U b

Community workplace exposure limits

Substances: 1-Methoxy-2-propanol
EU limits (8h): 375 mg/m³, 100 ppm
EU limits (Short-term): 568 mg/m³, 150 ppm
Notes: Skin

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:	recommended
Eye protection:	use safety goggles
Protective clothing:	usual work clothes

General health and safety measures

Respect good personal hygiene.

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:	liquid
Colour:	blue
Odour:	alcoholic
pH value (undiluted):	approx. 8.0
pH value (1 %):	approx. 7.0
Melting point/Freezing point (°C):	approx. -25
Boiling temperature (°C):	80 - 100
Flashpoint (°C):	approx. 33
Flammability (solid, gas):	not applicable
Lower explosion limit:	not determined
Upper explosion limit:	not determined
Vapour pressure (hPa):	not determined
Relative vapor density:	not determined
Density (20 °C):	approx. 0.955
Solubility:	completely mixable with water
Partition coefficient (KOW):	not determined
Ignition temperature:	not determined
Decomposition temperature:	not determined
Dynamic viscosity (mPas):	< 10
Particle properties:	not applicable

9.2 Other information

Other safety characteristics
No other physical and chemical data has been recorded.

SECTION 10. Stability and Reactivity

10.1 Reactivity
May heat up during dilution.

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
No hazardous conditions known. 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 hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Alcohols, C10-16, ethoxylated, propoxylated
LD50 oral > 300-2000 mg/kg body weight (rat) (directive 84/449/EWG, B.1)

Acute Toxicity Estimate of the mixture:
ATE mix (oral) > 2000 mg/kg body weight

Skin Corrosion / Irritation

The mixture does not meet the criteria for classification.

Serious Eye Damage / Irritation

Mixture is classified as irritating to the eyes.

Sensitisation

The sensitising substances in the mixture do not meet the criteria for classification.

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)

Mixture is not classified as specific target organ toxic (single exposure).

Specific target organ toxicity (repeated exposure)

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

Aspiration hazard

Not classified. Mixture does not contain any hydrocarbons.

11.2 Information on other hazards

Endocrine disrupting properties

This mixture does not contain any substances which are identified as endocrine disrupting.

Other information

No further data available.

Continued on next page

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

This mixture does not contain any substances classified as dangerous for the environment.

12.2 Persistence and degradability

Ethanol
Readily biodegradable (97%, OECD 301B)

1-Methoxy-2-propanol
Fast photochemical oxidation in the air. Readily biodegradable (90-100%, OECD 301E).

Alcohol, C10-16, ethoxylated, propoxylated
Readily biodegradable (according to OECD criteria)

Alkylpolyglucoside
Readily biodegradable (according to OECD criteria)

The surfactants contained in this preparation comply with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents.

12.3 Bioaccumulative potential

Ethanol
Not expected to bioaccumulate.

1-Methoxy-2-propanol
Not expected to bioaccumulate.

Alcohol, C10-16, ethoxylated, propoxylated
Not expected to bioaccumulate.

Alkylpolyglucoside
Not expected to bioaccumulate.

12.4 Mobility in soil

Ethanol
Absorption to solid soil phase is not expected. Substance is highly volatile.

1-Methoxy-2-propanol
No further relevant information available.

Alcohol, C10-16, ethoxylated, propoxylated
Absorption to solid soil phase is possible. Substance is not volatile.

Alkylpolyglucoside
Absorption to solid soil phase is possible. Substance is not volatile.

12.5 Results of PBT and vPvB assessment

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

12.6 Endocrine disrupting properties

This mixture does not contain any substances which are identified as endocrine disrupting.

Continued on next page

12.7 Other adverse effects

The mixture does not contain any substances which are listed in Regulation (EC) 1005/2009 on substances that deplete the ozone layer.

SECTION 13. Disposal considerations

13.1 Waste treatment methods

Recommendation

Cleaning concentrates should not be disposed of via wastewater. Hazardous waste according to European list of wastes. Dispose of in accordance with local, official regulations.

Waste codes/waste designations according to EWC

20 01 29 (detergents containing 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)

Cleaned package

Non contaminated and clean packagings can be used for recycling.

SECTION 14. Transport information

14.1 UN number or ID number

1170

14.2 UN Proper shipping name:

ADR / RID:

Ethanol solution

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

Ethanol solution

14.3 Transport hazard class(es)

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

3

14.4 Packing group

III

14.5 Enviromental hazards

Not classified.

Continued on next page

14.6 Special precautions for user

See section 6 and 8.

14.7 Maritime transport in bulk according to IMO instruments

not applicable

SECTION 15. Regulatory information

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

EU regulations

Subject to the Regulation (EC) No. 648/2004 on detergents.

National regulations

Observe employment restrictions for young people (§ 22 JArbSchG).
Water hazard class: WGK 1 (in accordance with German regulation AwSV)

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: 1.1, 2.1, 2.2, 3.2, 11.1, 16

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

Flam. Liq 2, H225 = Flammable liquids, category 2, Highly flammable liquid and vapour.
Flam. Liq 3, H226 = Flammable liquids, category 3, Flammable liquid and vapour.
Acute Tox. 4, H302 = Acute toxicity, category 4, Harmful if swallowed.
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.
Skin Sens. 1, H317 = Skin sensitisation, category 1A/B, May cause an allergic skin reaction.
Eye Dam. 1, H318 = Eye damage / irritation, category 1, Causes serious eye damage.
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 1, H410 = Hazardous to the aquatic environment, chronic, category 1, Very toxic to aquatic life with long lasting effects.

Key literature references and sources for data

REACH Regulation (EC) No. 1907/2006
CLP Regulation (EC) No. 1272/2008

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