Safety Data Sheet
ACC 1120

Safety Data Sheet dated 7/3/2013, version 1
In compliance with Regulation (EC) 453/2010

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Mixture identification:

Trade name: ACC 1120

Product type: Paint stripper

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

Recommended use:

Metal surface treatment products, including galvanic and electroplating products.

Uses advised against:

Not available

1.3. Details of the supplier of the safety data sheet

Supplier:

AirChem Consumables, LOB 10, Office # 10F14, JAFZA, Dubai, UAE
Tel: +971-4-881 8084, Fax: +971-4-881 6022, Email: airacc@acc.ae

Competent person responsible for the safety data sheet:

airacc@acc.ae

1.4. Emergency telephone number

AirChem Consumables, Tel: +971-4-881 8084, Fax: +971-4-881 6022, Email: airacc@acc.ae

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Directive criteria, 67/548/CE, 99/45/EC and following amendments thereof:

Properties / Symbols:

Xn Harmful
Xi Irritant

R Phrases:

R20/22 Harmful by inhalation and if swallowed.
R36/38 Irritating to eyes and skin.
R43 May cause sensitization by skin contact.
R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Adverse physicochemical, human health and environmental effects:

The product is harmful following acute exposure to it and poses a serious health threat if inhaled or ingested.
If brought into contact with the eyes, the product causes irritation that may last for over 24 hours, and if brought into contact with the skin it causes significant inflammation with erythema, scabs, and oedema.
If brought into contact with the skin, the product may cause sensitisation of the skin.
Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

2.2. Label elements

Directive criteria, 67/548/CE, 99/45/EC and following amendments thereof:

Symbols:

Xn Harmful

R Phrases:

R20/22 Harmful by inhalation and if swallowed.
R36/38 Irritating to eyes and skin.
R43 May cause sensitization by skin contact.
R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S Phrases:
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/37 Wear suitable protective clothing and gloves.
S41 In case of fire and/or explosion do not breathe fumes.
S60 This material and its container must be disposed of as hazardous waste.
Contents:
Benzyl alcohol
(R)-p-Mentha-1,8-diene

Special provisions according to Annex XVII of REACH and subsequent amendments:
None

2.3. Other hazards
vPvB Substances: None - PBT Substances: None
Other Hazards:
No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances
Not applicable

3.2. Mixtures
Hazardous components within the meaning of EEC directive 67/548 and CLP regulation and related classification:

40% - 60% Benzyl alcohol
REACH No.: 01-2119492630-38-XXXX, Index number: 603-057-00-5, CAS: 100-51-6, EC: 202-859-9
Xn,Xi; R20/22-36
3.1/4/Oral Acute Tox. 4 H302
3.3/2 Eye Irrit. 2 H319
3.1/4/Inhal Acute Tox. 4 H332

5% - 10% Hydrogen peroxide
REACH No.: 01-2119485845-22-XXXX, Index number: 008-003-00-9, CAS: 7722-84-1, EC: 231-765-0
O,Xn,C; R20/22-35-5-8
2.13/1 Ox. Liq. 1 H271
3.2/1A Skin Corr. 1A H314
3.1/4/Oral Acute Tox. 4 H302
3.1/4/Inhal Acute Tox. 4 H332

1% - 5% (R)-p-Mentha-1,8-diene
Index number: 601-029-00-7, CAS: 5989-27-5, EC: 227-813-5
Xi,N; R10-38-43-50/53
2.6/3 Flam. Liq. 3 H226
3.10/1 Asp. Tox. 1 H304
3.2/2 Skin Irrit. 2 H315
3.4.2/1 Skin Sens. 1 H317

4.1/A1 Aquatic Acute 1 H400

4.1/C1 Aquatic Chronic 1 H410

1% - 5% 1,4-Bis(2-hydroxyethoxy)-2-butyne
CAS: 1606-85-5, EC: 216-526-0
Xn; R65
3.10/1 Asp. Tox. 1 H304

0.1% - 0.25% Zinc oxide
REACH No.: 01-2119463881-32-XXXX, Index number: 030-013-00-7, CAS: 1314-13-2, EC: 215-222-5
N; R50/53
4.1/A1 Aquatic Acute 1 H400

4.1/C1 Aquatic Chronic 1 H410

For the complete text of the hazard and risk phrases refer to paragraph 16

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.
Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.
Wash thoroughly the body (shower or bath).
Remove contaminated clothing immediatley and dispose off safely.
After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an opthalmologist immediately.
Protect uninjured eye.

In case of Ingestion:

Do NOT induce vomiting.
Give nothing to eat or drink.

In case of Inhalation:

If breathing is irregular or stopped, administer artificial respiration.
In case of inhalation, consult a doctor immediately and show him packing or label.

4.2. Most important symptoms and effects, both acute and delayed

None

4.3. Indication of any immediate medical attention and special treatment needed

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).
Treatment:
None

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:
Water.
Carbon dioxide (CO2).
Extinguishing media which must not be used for safety reasons:
None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

5.3. Advice for firefighters

Use suitable breathing apparatus .
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.
Wear breathing apparatus if exposed to vapours/dusts/aerosols.
Provide adequate ventilation.
Use appropriate respiratory protection.
See protective measures under point 7 and 8.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.
Retain contaminated washing water and dispose it.
In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.
Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up

Wash with plenty of water.

6.4. Reference to other sections

See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhaltion of vapours and mists.
Use localized ventilation system.
Don't use empty container before they have been cleaned.
Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.
Contamined clothing should be changed before entering eating areas.
Do not eat or drink while working.
See also section 8 for recomened protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

Keep away from food, drink and feed.
Incompatible materials:
None in particular.
Instructions as regards storage premises:
Adequately ventilated premises.

7.3. Specific end use(s)

For more information see Technical date bulletin
None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Contained substances

Benzyl alcohol - CAS: 100-51-6

EU, 10 ppm - Behaviour: Binding

Hydrogen peroxide - CAS: 7722-84-1

ACGIH - LTE: 1.39 mg/m3, 1 ppm - Behaviour: Binding - Notes: A3 Irritation of the skin, respiratory and eye

EU, 1 ppm - Behaviour: Binding

(R)-p-Mentha-1,8-diene - CAS: 5989-27-5

07 - LTE: 110 mg/m3, 20 ppm

Zinc oxide - CAS: 1314-13-2

ACGIH - LTE: 2 mg/m3, 0.6 ppm - STE: 10 mg/m3, 3 ppm - Behaviour: Binding - Notes: Respirable fraction metal-fume fever

DNEL Exposure Limit Values

Benzyl alcohol - CAS: 100-51-6

Worker Professional: 47 mg/kg - Consumer: 28.5 mg/kg - Exposure: Human Dermal Short Term, systemic effects
Worker Professional: 450 mg/m3 - Consumer: 95.5 mg/m3 - Exposure: Human Inhalation Short Term, systemic effects
Worker Professional: 9.5 mg/kg - Consumer: 5.7 mg/kg - Exposure: Human Dermal Long Term, systemic effects
Worker Professional: 90 mg/m3 - Consumer: 19.1 mg/kg - Exposure: Human Inhalation Long Term, systemic effects
Consumer: 25 mg/kg - Exposure: Human Oral Short Term, systemic effects
Consumer: 5 mg/kg - Exposure: Human Oral Long Term, systemic effects

Hydrogen peroxide - CAS: 7722-84-1
Worker Professional: 3 mg/m3 - Consumer: 1.93 mg/m3 - Exposure: Human Inhalation Short Term, local effects
Worker Professional: 1.4 mg/m3 - Consumer: 0.21 mg/m3 - Exposure: Human Inhalation Long Term, local effects

Zinc oxide - CAS: 1314-13-2
Worker Professional: 83 mg/kg - Exposure: Human Dermal Long Term, systemic effects
Worker Professional: 5 mg/m3 - Exposure: Human Inhalation Long Term, systemic effects
Consumer: 83 mg/kg - Exposure: Human Dermal Long Term, systemic effects
Consumer: 2.5 mg/m3 - Exposure: Human Inhalation Long Term, systemic effects
Consumer: 0.83 mg/kg - Exposure: Human Oral Long Term, systemic effects

PNEC Exposure Limit Values

Benzyl alcohol - CAS: 100-51-6
Target: Soil - Value: 0.456 mg/kg
Target: Sewerage treatment plants - Value: 39 mg/l
Target: Freshwater sediments - Value: 5.27 mg/kg
Target: Marine water sediments - Value: 0.527 mg/kg
Target: Marine water - Value: 0.1 mg/l

Hydrogen peroxide - CAS: 7722-84-1
Target: Freshwater sediments - Value: 0.047 mg/kg
Target: Marine water sediments - Value: 0.047 mg/kg
Target: Soil (agricultural) - Value: 0.0023 mg/kg
Target: Fresh Water - Value: 0.0126 mg/l
Target: Marine water - Value: 0.0126 mg/l
Target: Occasional issue - Value: 0.0138 mg/l

Zinc oxide - CAS: 1314-13-2
Target: Soil (agricultural) - Value: 35.6 mg/kg
Target: Marine water - Value: 6.1 µg/l
Target: Marine water sediments - Value: 56.5 mg/kg
Target: Fresh Water - Value: 20.6 µg/l
Target: Freshwater sediments - Value: 117.8 mg/kg

8.2. Exposure controls

Eye protection:
Use close fitting safety goggles, don't use eye lens.

Protection for skin:
Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:
Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

Respiratory protection:
Use adequate protective respiratory equipment.

Thermal Hazards:
None

Environmental exposure controls:
None

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance and colour:	viscous off-white liquid

Odour:	n.av.
Odour threshold:	n.av. mg/m3
pH:	8
Melting point / freezing point:	n.av. °C
Initial boiling point and boiling range:	initial 100 °C
Solid/gas flammability:	na
Upper/lower flammability or explosive limits:	n.av. % v/v
Vapour density (air=1):	> 1
Flash point:	none to boiling °C
Evaporation rate:	n.av.
Vapour pressure:	3.0 kPa
Relative density:	n.av. g/ml
Solubility in water:	partial
Solubility in oil:	partial
Partition coefficient (n-octanol/water):	n.av.
Auto-ignition temperature:	none °C
Decomposition temperature:	n.av. °C
Viscosity:	> 7000 mPa.s
Explosive properties:	none
Oxidizing properties:	n.av.

9.2. Other information

Miscibility:	n.av.
Fat Solubility:	n.av.
Conductivity:	n.av.
Substance Groups relevant properties:	n.av.

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions

It may generate toxic gases on contact with acids, amides, aliphatic and aromatic amines, carbamates, halogenated organic substances, isocyanates, organic sulphides, nitriles, organophosphates, inorganic sulphides, and polymerisable substances.

It may catch fire on contact with other substances.

10.4. Conditions to avoid

Stable under normal conditions.

10.5. Incompatible materials

None in particular.

10.6. Hazardous decomposition products

None.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological information of the main substances found in the mixture:

Benzyl alcohol - CAS: 100-51-6

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat = 1230 mg/kg

Test: LD50 - Route: Skin - Species: Rabbit = 2000 mg/kg

Test: LC50 - Route: Inhalation - Species: Rat = 1000 Ppm - Duration: 8h

Test: LC50 - Route: Inhalation - Species: Rat > 4178 mg/l - Duration: 4h

Hydrogen peroxide - CAS: 7722-84-1

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat = 1026 mg/kg - Notes: Male rat

Test: LC50 - Route: Inhalation - Species: Rat > 0.17 mg/l - Duration: 4h

Test: LD50 - Route: Skin - Species: Rabbit > 2000 mg/kg

Test: LD50 - Route: Oral - Species: Rat = 693.7 mg/kg - Notes: Female rat

b) skin corrosion/irritation:
Test: Skin Irritant - Route: Skin - Species: Rabbit Positive
c) serious eye damage/irritation:
Test: Eye Irritant - Route: EYES - Species: Rabbit Positive
g) reproductive toxicity:
Test: Genotoxicity Positive - Source: Ames test - Notes: in vitro
(R)-p-Mentha-1,8-diene - CAS: 5989-27-5
a) acute toxicity:
Test: LD50 - Route: Oral - Species: Rat = 4400 mg/kg
Test: LD50 - Route: Oral - Species: Mouse > 5500 mg/kg
Test: LD50 - Route: Skin - Species: Rabbit > 2000 mg/kg
1,4-Bis(2-hydroxyethoxy)-2-butyne - CAS: 1606-85-5
a) acute toxicity:
Test: LD50 - Route: Oral - Species: Rat = 1600 mg/kg
Test: LD50 - Route: Skin - Species: Rabbit > 2000 mg/kg
Zinc oxide - CAS: 1314-13-2
a) acute toxicity:
Test: LC50 - Route: Inhalation - Species: Rat > 5.7 mg/l - Duration: 4h

If not differently specified, the information required in Regulation 453/2010/EC listed below must be considered as N.AV.:
a) acute toxicity;
b) skin corrosion/irritation;
c) serious eye damage/irritation;
d) respiratory or skin sensitisation;
e) germ cell mutagenicity;
f) carcinogenicity;
g) reproductive toxicity;
h) STOT-single exposure;
i) STOT-repeated exposure;
j) aspiration hazard.

SECTION 12: Ecological information

12.1. Toxicity
Based on the information available it is not expected that this product may cause any adverse environmental effect when use instructions and disposal recommendations are followed.
Adopt good working practices, so that the product is not released into the environment.
List of substances hazardous to the environment and eco-toxicological information available:
Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Benzyl alcohol - CAS: 100-51-6
a) Aquatic acute toxicity:
Endpoint: LC50 - Species: Fish = 10 mg/l - Duration h: 96 - Notes: Lepomis Macrochirus
Endpoint: LC50 - Species: Fish = 770 mg/l - Duration h: 1 - Notes: Pimephales promelas
Endpoint: EC50 - Species: Daphnia = 230 mg/l - Duration h: 48 - Notes: Daphnia Magna
Endpoint: EC50 - Species: Daphnia = 55 mg/l - Duration h: 24 - Notes: Daphnia Magna
Endpoint: EC50 - Species: Algae = 770 mg/l - Duration h: 72 - Notes: Pseudokirchneriella subcapitata
Endpoint: EC50 - Species: Bacteria = 390 mg/l - Duration h: 24
Hydrogen peroxide - CAS: 7722-84-1
a) Aquatic acute toxicity:
Endpoint: EC50 - Species: Daphnia = 2.4 mg/l - Duration h: 48 - Notes: Daphnia pulex
Endpoint: LC50 - Species: Fish = 16.4 mg/l - Duration h: 96 - Notes: Pimephales promelas
Endpoint: EC50 - Species: Algae = 1.38 mg/l - Duration h: 72 - Notes: Skeletonema costatum
Endpoint: LC50 - Species: Fish = 37.4 mg/l - Duration h: 96 - Notes: Ictalurus puntctatus
Endpoint: LC50 - Species: Fish = 31.3 mg/l - Duration h: 24 - Notes: Oncorhynchus mykiss
Endpoint: EC50 - Species: Daphnia = 2.4 mg/l - Duration h: 48 - Notes: Daphnia magna

Endpoint: IC50 - Species: Algae = 2.5 mg/l - Duration h: 72 - Notes: Chlorella vulgaris
Endpoint: EC50 - Species: Daphnia = 7.7 mg/l - Duration h: 24 - Notes: Daphnia magna
(R)-p-Mentha-1,8-diene - CAS: 5989-27-5
a) Aquatic acute toxicity:
Endpoint: LC50 - Species: Fish = 33 mg/l - Duration h: 96
Endpoint: EC50 - Species: Daphnia = 69.6 mg/l - Duration h: 48
Zinc oxide - CAS: 1314-13-2
a) Aquatic acute toxicity:
Endpoint: EC50 - Species: Algae = 0.17 mg/l - Duration h: 72 - Notes: Selenastrum Capricornutum
Endpoint: LC50 - Species: Fish = 1.1 mg/l - Duration h: 96 - Notes: Onocrthynchus mykiss a 2,5 ppm fresh water
Endpoint: EC50 - Species: Daphnia = 0.83 mg/l - Duration h: 48 - Notes: Ceriodaphnia dubia
Endpoint: EC50 - Species: Daphnia = 3.3 mg/l - Duration h: 48 - Notes: Daphnia magna
Endpoint: LC50 - Species: Fish = 1793 mg/l - Duration h: 96 - Notes: Danio Rerio

12.2. Persistence and degradability
Benzyl alcohol - CAS: 100-51-6
Biodegradability: Rapidly degradable - Test: Not applicable - Duration: Not applicable - %: Not applicable - Notes: Not applicable
Hydrogen peroxide - CAS: 7722-84-1
Biodegradability: Rapidly degradable - Test: Not applicable - Duration: Not applicable - %: Not applicable - Notes: Not applicable
Regulation (EC) No. 648/2004 on Detergents and amendments:
Not applicable

12.3. Bioaccumulative potential
Hydrogen peroxide - CAS: 7722-84-1
Bioaccumulation: Not bioaccumulative - Test: Not applicable Not applicable - Duration: Not applicable - Notes: Not applicable

12.4. Mobility in soil
Not applicable

12.5. Results of PBT and vPvB assessment
vPvB Substances: None - PBT Substances: None

12.6. Other adverse effects
None

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Product and its residue:
Do not dispose in the canals of wastewater, waterways and soil.
The codes indicating the type of waste are considered based on the recommendations and scheduled use of this product. Different codes may be assigned bused on the end user's use and the characteristics of the disposal.
Waste code CER/EWC (2000/532/CE), attributable to the product as:
08 01 21 * waste paint or varnish remover
H5 Harmful
Any remaining product should be disposed of with the material.
Containers/contaminated packaging
Containers, even completely empty, must not be disposed in the environment. The packigings which can not be cleaned should be disposed of as the material.
Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

SECTION 14: Transport information

14.1. UN number
Not classified as dangerous in the meaning of transport regulations.

14.2. UN proper shipping name
Not applicable

14.3. Transport hazard class(es)

Not applicable

14.4. Packing group

Not applicable

14.5. Environmental hazards

ADR-Enviromental Pollutant: No

IMDG-Marine pollutant: No

14.6. Special precautions for user

Not applicable

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

No

SECTION 15: Regulatory information

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

1999/13/EC (VOC directive)

Volatile Organic compounds - VOCs = 57.84 %

Volatile CMR substances = 0.00 %

Halogenated VOCs which are assigned the risk phrase R40 = 0.00 %

Organic Carbon - C = 0.45

15.2. Chemical safety assessment

Not available

SECTION 16: Other information

Full text of phrases referred to in Section 3:

R10 Flammable.
R20/22 Harmful by inhalation and if swallowed.
R22 Harmful if swallowed.
R35 Causes severe burns.
R36 Irritating to eyes.
R36/38 Irritating to eyes and skin.
R38 Irritating to skin.
R43 May cause sensitization by skin contact.
R5 Heating may cause an explosion.
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R65 Harmful: may cause lung damage if swallowed.
R8 Contact with combustible material may cause fire.

H302 Harmful if swallowed.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H271 May cause fire or explosion; strong oxidiser.
H314 Causes severe skin burns and eye damage.
H226 Flammable liquid and vapour.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

This document was prepared by a competent person who has received appropriate training.

This MSDS cancels and replaces any preceding release.

Where applicable, refer to the following regulatory provisions :

Council Directive 67/548/EEC (Classification, packaging and labelling of dangerous substances) and subsequent amendments; Regulation (EC) n°1272/2008; Regulation (EC) N. 790/2009 (annex VI), Regulation (EC) n. 1907/2006 (REACH).

Commmission Directive 1999/45/EC (Classification, packaging and labelling of dangerous preparation) and subsequent amendments; Commmission Directive n. 2006/8/CE.

Regulation (EC) nr 648/2004 and CE N. 907/2006 (Detergents).

Directive 2003/105/EC ('Activities linked to risks of serious accidents') and subsequent amendments.

Directive 75/324/EEC (aerosols) and subsequent amendments. Directive 76/768/CEE (cosmetic products) and subsequent amendments.
Directive 76/769/EEC (restrictions on the marketing and use of certain dangerous substances and preparations) and subsequent amendments. Regulation (EC) N. 304/2003 and subsequent amendments.
Directive 98/8/CE (placing of biocidal products on the market) and subsequent amendments.
Directives 91/156/CEE, 91/689/CEE, 94/62/CE (Disposal of waste) and subsequent amendments.
The European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR), current edition.
regulations IATA/ICAO = Dangerous Goods Regulations by air, current edition.
RID = Regulations concerning the International Carriage of Dangerous Goods by Rail, current edition.
IMDG Code = International Maritime Dangerous Goods Code produced by the International Maritime Organization (IMO), current edition.
Directive 91/271/EEC and 91/676/CEE (protection of waters) and subsequent amendments.

Main bibliographic sources:

ESIS: European chemical Substances Information System and Environmental hazard classification.
Occupational exposure limit values (Commission Directives 2000/39/EC and 2006/15/CE)
ACGIH - TLV's for 2010
NIOSH - Registry of toxic effects of chemical substances (1983)
Material Safety Data Sheets of chemicals, REACH database
Material Safety Data Sheet and Technical Data of raw material as by Supplier
The ISS National Inventory of Chemical Substances (INSC)

Abbreviations and acronyms:

TLV-TWA = Threshold Limit Value- time-weighed average, 8-hour workday, 40-hour workweek; TLV-STEL-15 min = Threshold Limit Values - Short Term Exposure Limit; TLV-C = Ceiling exposure limit; Notes: IBE= Biological Exposure Indices; SEN= sensitizer; Skin= Can be absorbed through the skin. Carcinogenicity categories: A1 / A2 = confirmed / suspected human carcinogen; A3 = Animal carcinogen; A4 / A5 = Not Classificable/not suspected as a human carcinogen. ACGIH = American Conference on Governmental Industrial Hygienists. OEL =Occupational Exposure Limit. LTE =long term exposure, STE=short term exposure.
n.av.= Not Available, n.a. = not applicable; LD50=lethal dose (solids and liquids), LC50=lethal concentration (gases) that will kill 50% of the test animals; ADR= European Agreement concerning the International Carriage of Dangerous Goods by Road. Regulations IATA/ICAO = Dangerous Goods Regulations by air, current edition.
RID = Regulations concerning the International Carriage of Dangerous Goods by Rail, current edition.
IMDG Code = International Maritime Dangerous Goods Code produced by the International Maritime Organization (IMO), current edition.
PBT = Persistent, Bioaccumulative and Toxic substances. ; vPvB = very Persistent and very Bioaccumulative substances; CMR = Carcinogenic, mutagenic or reproduction toxic substances.

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.
It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.