

Safety Data Sheet







GT4A2N - READY TO USE THICK PLATING BATH 4G/L GOLD 2N COLOR

Safety Data Sheet dated 5/26/2022 version 4

Compliant with regulation (CE) n. 1907/2006 REACH, Annex II, and subsequent amendments introduced by Commission Regulation (EU) no. 2015/830

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

1.1. Product identifier

Mixture identification:

Trade name: GT4A2N - READY TO USE THICK PLATING BATH 4G/L GOLD 2N COLOR

Trade code: GT4A2N Product type and use: SL

Registration Number N/A

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

Recommended use: For electroplating industry

Uses advised against: N.A.

1.3. Details of the supplier of the safety data sheet

Company: LEGOR GROUP S.p.A. Via del Lavoro, 1 36050 Bressanvido (VI)

Italy

Tel.: +39.0444.467911 Fax.: +39.0444.660677

Competent person responsible for the safety data sheet: info@legor.com

1.4. Emergency telephone number

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SECTION 2: Hazards identification







2.1. Classification of the substance or mixture

Regulation (EC) n. 1272/2008 (CLP)

Acute Tox. 3 Toxic if inhaled. Carc. 1A May cause cancer.

Repr. 1B May damage fertility or the unborn child. Aquatic Chronic 2 Toxic to aquatic life with long lasting effects. Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Regulation (EC) No 1272/2008 (CLP):

Hazard pictograms and Signal Word



Danger

Hazard statements

H331 Toxic if inhaled. H350 May cause cancer.

H360 May damage fertility or the unborn child. Toxic to aquatic life with long lasting effects. H411

Precautionary statements

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/...

IF exposed or concerned: Get medical advice/attention. P308+P313

P391 Collect spillage.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

Contains

Nickel Sulfate Hexahydrate

Potassium dicyanoaurate (I)

Special provisions according to Annex XVII of REACH and subsequent amendments:

None.

2.3. Other hazards

No PBT Ingredients are present

Other Hazards: No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Mixture identification: GT4A2N - READY TO USE THICK PLATING BATH 4G/L GOLD 2N COLOR

Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Numb.	Classification	Registration Number
< 5%	Nickel Sulfate Hexahydrate	EC:232-104-9	Acute Tox. 4, H302; Skin Irrit. 2, H315; Acute Tox. 4, H332; Muta. 2, H341; STOT RE 1, H372; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Skin Sens. 1, H317; Resp. Sens. 1, H334; Carc. 1A, H350i; Repr. 1B, H360D, M-Acute:1	01-2119439361-44-000
< 5%	Indium Sulfate		Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335; Aquatic Chronic 3, H412	
< 5%	Potassium dicyanoaurate (I)	CAS:13967-50-5 EC:237-748-4	Met. Corr. 1, H290; Skin Irrit. 2, H315; Eye Dam. 1, H318; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Acute Tox. 2, H300; Skin Sens. 1, H317; Acute Tox. 2, H330, M:1, M-Acute:1, EUH032	

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.

In case of eyes contact:

Wash immediately with water.

In case of Ingestion:

Do not induce vomiting, get medical attention showing the SDS and label hazardous.

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

N.A.

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).

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.

For emergency responders:

Wear personal protection equipment.

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

Suitable material for taking up: absorbing material, organic, sand

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, inhalation of vapours and mists.

Exercise the greatest care when handling or opening the container.

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 recommended protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

Always keep in a well ventilated place.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Cool and adequately ventilated.

7.3. Specific end use(s)

Recommendation(s)

None in particular

Industrial sector specific solutions:

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Predicted No Effect Concentration (PNEC) values

Nickel Sulfate Hexahydrate CAS: 10101-97-0 Exposure Route: Fresh Water; PNEC Limit: 0.0071 mg/l

Exposure Route: Marine water; PNEC Limit: 0.0086 mg/l

Exposure Route: Terrestrial compartment; PNEC Limit: 29.9 mg/kg

Exposure Route: STP; PNEC Limit: 0.33 mg/l

Exposure Route: Freshwater sediments; PNEC Limit: 109 mg/kg/d

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Exposure Route: Marine water sediments; PNEC Limit: 109 mg/kg/d Exposure Route: Secondary poisoning; PNEC Limit: 120 mg/kg

Remark: food for predators

(I) CAS: 13967-50-5

Potassium dicyanoaurate Exposure Route: Fresh Water; PNEC Limit: 0.0002 mg/l

Exposure Route: Intermittent releases (fresh water); PNEC Limit: 0.002 mg/l

Exposure Route: Marine water; PNEC Limit: 0.00002 mg/l

Exposure Route: STP; PNEC Limit: 6 mg/l

Exposure Route: Freshwater sediments; PNEC Limit: 0.33 mg/kg Exposure Route: Marine water sediments; PNEC Limit: 0.033 mg/kg

Derived No Effect Level (DNEL) values

Nickel Sulfate Hexahydrate CAS: 10101-97-0 Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects

Worker Professional: 0.05 mg/m3; Consumer: 0.00006 mg/m3

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, systemic effects

Worker Professional: 104 mg/m3; Consumer: 8.8 mg/m3

Exposure Route: Human Inhalation: Exposure Frequency: Long Term, local effects

Worker Professional: 0.05 mg/m3; Consumer: 0.00006 mg/m3

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, local effects

Worker Professional: 1.6 mg/m3; Consumer: 0.1 mg/m3

Exposure Route: Human Dermal; Exposure Frequency: Long Term, local effects

Worker Professional: 0.00044 mg/cm2

Exposure Route: Human Oral; Exposure Frequency: Long Term, systemic effects

Consumer: 11 µg/kg bw/day

Exposure Route: Human Oral; Exposure Frequency: Short Term, systemic effects

Consumer: 370 µg/kg bw/day

CÁS: 13967-50-5

Potassium dicyanoaurate Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects

Worker Professional: 0.071 mg/m3

Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects

Worker Professional: 100 µg/kg bw/day

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:

N.A.

Environmental exposure controls:

N.A.

Hygienic and Technical measures

NΔ

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical State: Liquid

Appearance and colour: Green Liquid

Odour: Typical

Odour threshold: N.A.

pH: 3,50

Melting point / freezing point: N.A.

Initial boiling point and boiling range: N.A.

Flash point: N.A. **Evaporation rate:** N.A.

Upper/lower flammability or explosive limits: N.A.

Vapour density: N.A. Vapour pressure: N.A. Relative density: N.A. Solubility in water: Total Solubility in oil: N.A.

Partition coefficient (n-octanol/water): N.A.

Auto-ignition temperature: N.A. **Decomposition temperature:** N.A.

Viscosity: N.A.

Explosive properties: n/a Oxidizing properties: n/a Solid/gas flammability: N.A.

9.2. Other information

VOC N.A.

Substance Groups relevant properties N.A.

Miscibility: N.A. Conductivity: N.A.

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

Data not available.

10.3. Possibility of hazardous reactions

None.

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 Preparation

a) acute toxicity The product is classified: Acute Tox. 3(H331)

b) skin corrosion/irritation Not classified

Based on available data, the classification criteria are not met

c) serious eye damage/irritation Not classified

Based on available data, the classification criteria are not met

d) respiratory or skin sensitisation Not classified

Based on available data, the classification criteria are not met

e) germ cell mutagenicity Not classified

Based on available data, the classification criteria are not met

The product is classified: Carc. 1A(H350) f) carcinogenicity g) reproductive toxicity The product is classified: Repr. 1B(H360)

h) STOT-single exposure Not classified

Based on available data, the classification criteria are not met

i) STOT-repeated exposure Not classified

Based on available data, the classification criteria are not met

Not classified j) aspiration hazard

Based on available data, the classification criteria are not met

Toxicological information on main components of the mixture:

Nickel Sulfate a) acute toxicity LC50 Inhalation Rat = 2.48 mg/l 4h **OECD** LD50 Oral Rat = 361 mg/kg

OECD-425

f) carcinogenicity

Carcinogenicity Oral Rat

2 years treatment: Keratoacanthoma

Potassium dicyanoaurate a) acute toxicity

(I)

LD50 Oral Rat = 29.2

LD50 Skin Rat > 2000

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

Eco-Toxicological Information:

Toxic to aquatic life with long lasting effects.

List of Eco-Toxicological properties of the product

The product is classified: Aquatic Chronic 2(H411)

List of Eco-Toxicological properties of the components

Component	Ident. Numb.	Ecotox Data
Component	Taciici itaiiibi	ECOLOX Dutu

Nickel Sulfate Hexahydrate

CAS: 10101-97- a) Aquatic acute toxicity: LC50 Fish Rainbow trout = 15.3 mg/l 96 0 - EINECS:

232-104-9 -INDEX: 028-009-00-5

> a) Aquatic acute toxicity: EC50 Shellfish Daphnia magna = 6.68 mg/l 48 a) Aquatic acute toxicity: EC50 Algae Pseudokirchneriella subcapitata = 81.5

mg/l 72

Potassium dicyanoaurate (I)

CAS: 13967-50- a) Aquatic acute toxicity: LC50 Fish = 5.7 mg/l 96h

5 - EINECS: 237-748-4

a) Aquatic acute toxicity: EC50 Shellfish Daphnia Magna > 0.2 mg/l 48h

a) Aquatic acute toxicity: EC50 Algae = 30 mg/l 72h a) Aquatic acute toxicity: EC10 Algae = 6.4 mg/l 72h

12.2. Persistence and degradability

Persitence/Degradabili Value Notes: Component

ty:

Potassium dicyanoaurate (I) Solubility in water

143000. mg/l 000

12.3. Bioaccumulative potential

N.A.

12.4. Mobility in soil

NΑ

12.5. Results of PBT and vPvB assessment

No PBT Ingredients are present

12.6. Other adverse effects

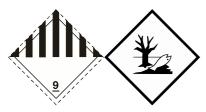
N.A.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

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

3082

14.2. UN proper shipping name

ADR-Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Nickel Sulfate Hexahydrate) IATA-Technical name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Nickel Sulfate Hexahydrate) IMDG-Technical name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Nickel Sulfate Hexahydrate)

14.3. Transport hazard class(es)

ADR-Class: 9 IATA-Class: 9 IMDG-Class: 9

14.4. Packing group

ADR-Packing Group: III IATA-Packing group: III IMDG-Packing group: III

14.5. Environmental hazards

Yes

Environmental Pollutant: Yes

14.6. Special precautions for user

Road and Rail (ADR-RID):

ADR-Label: 9

ADR - Hazard identification number: 90 ADR-Special Provisions: 274 335 375 601

ADR-Transport category (Tunnel restriction code): 3 (-)

Air (IATA):

IATA-Passenger Aircraft: 964 IATA-Cargo Aircraft: 964

IATA-Label: 9

IATA-Subsidiary hazards: -

IATA-Erg: 9L

IATA-Special Provisions: A97 A158 A197

Sea (IMDG):

IMDG-Stowage Code: Category A

IMDG-Stowage Note: -IMDG-Subsidiary hazards: -

IMDG-Special Provisions: 274 335 969

IMDG-Page: N/A IMDG-Label: N/A IMDG-EMS: F-A, S-F IMDG-MFAG: N/A

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

N.A.

SECTION 15: Regulatory information

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

Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Regulation (EC) n. 1907/2006 (REACH)

Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

Regulation (EU) n. 286/2011 (ATP 2 CLP)

Regulation (EU) n. 618/2012 (ATP 3 CLP)

Regulation (EU) n. 487/2013 (ATP 4 CLP)

Regulation (EU) n. 944/2013 (ATP 5 CLP)

Regulation (EU) n. 605/2014 (ATP 6 CLP)

Regulation (EU) n. 2015/1221 (ATP 7 CLP)

Regulation (EU) n. 2016/918 (ATP 8 CLP) Regulation (EU) n. 2016/1179 (ATP 9 CLP)

Regulation (EU) n. 2017/776 (ATP 10 CLP)

Regulation (EU) n. 2018/669 (ATP 11 CLP)

Regulation (EU) n. 2018/1480 (ATP 13 CLP)

Regulation (EU) n. 2019/521 (ATP 12 CLP)

Regulation (EU) n. 2020/217 (ATP 14 CLP) Regulation (EU) n. 2020/1182 (ATP 15 CLP)

Regulation (EU) n. 2021/643 (ATP 16 CLP)

Regulation (EU) 2015/830

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product: 3

Restrictions related to the substances contained: 75

Provisions related to directive EU 2012/18 (Seveso III):

NΙΛ

Regulation (EU) No 649/2012 (PIC regulation)

No substances listed

German Water Hazard Class.

Class 3: extremely hazardous.

SVHC Substances:

No data available

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

SECTION 16: Other information

Code	Description		
EUH032	Contact with acids liberates very toxic gas.		
H290	May be corrosive to metals.		
H300	Fatal if swallowed.		
H302	Harmful if swallowed.		
H315	Causes skin irritation.		
H317	May cause an allergic skin reaction.		
H318	Causes serious eye damage.		
H319	Causes serious eye irritation.		
H330	Fatal if inhaled.		
H331	Toxic if inhaled.		
H332	Harmful if inhaled.		
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.		
H335	May cause respiratory irritation.		
H341	Suspected of causing genetic defects.		
H350	May cause cancer.		
H350i	May cause cancer by inhalation.		
H360	May damage fertility or the unborn child.		
H360D	May damage the unborn child.		
H372	Causes damage to organs through prolonged or repeated exposure.		
H400	Very toxic to aquatic life.		
H410	Very toxic to aquatic life with long lasting effects.		
H411	Toxic to aquatic life with long lasting effects.		
H412	Harmful to aquatic life with long lasting effects.		
Code	Hazard class and hazard category	Description	
2.16/1	Met. Corr. 1	Substance or mixture corrosive to metals, Category 1	
3.1/2/Inhal	Acute Tox. 2	Acute toxicity (inhalation), Category 2	
3.1/2/Oral	Acute Tox. 2	Acute toxicity (oral), Category 2	

3.1/3/Inhal	Acute Tox. 3	Acute toxicity (inhalation), Category 3
3.1/4/Inhal	Acute Tox. 4	Acute toxicity (inhalation), Category 4
3.1/4/Oral	Acute Tox. 4	Acute toxicity (oral), Category 4
3.2/2	Skin Irrit. 2	Skin irritation, Category 2
3.3/1	Eye Dam. 1	Serious eye damage, Category 1
3.3/2	Eye Irrit. 2	Eye irritation, Category 2
3.4.1/1	Resp. Sens. 1	Respiratory Sensitisation, Category 1
3.4.2/1	Skin Sens. 1	Skin Sensitisation, Category 1
3.5/2	Muta. 2	Germ cell mutagenicity, Category 2
3.6/1A	Carc. 1A	Carcinogenicity, Category 1A
3.7/1B	Repr. 1B	Reproductive toxicity, Category 1B
3.8/3	STOT SE 3	Specific target organ toxicity — single exposure, Category 3
3.9/1	STOT RE 1	Specific target organ toxicity — repeated exposure, Category 1
4.1/A1	Aquatic Acute 1	Acute aquatic hazard, category 1
4.1/C1	Aquatic Chronic 1	Chronic (long term) aquatic hazard, category 1
4.1/C2	Aquatic Chronic 2	Chronic (long term) aquatic hazard, category 2
4.1/C3	Aquatic Chronic 3	Chronic (long term) aquatic hazard, category 3

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure	
3.1/3/Inhal	Calculation method	
3.6/1A	Calculation method	
3.7/1B	Calculation method	

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

Main bibliographic sources:

4.1/C2

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

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.

Calculation method

This MSDS cancels and replaces any preceding release.

Legend to abbreviations and acronyms used in the safety data sheet:

ACGIH: American Conference of Governmental Industrial Hygienists

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

AND: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

ATE: Acute Toxicity Estimate

ATEmix: Acute toxicity Estimate (Mixtures)

BCF: Biological Concentration Factor

BEI: Biological Exposure Index

BOD: Biochemical Oxygen Demand

CAS: Chemical Abstracts Service (division of the American Chemical Society).

CAV: Poison Center

CE: European Community

CLP: Classification, Labeling, Packaging.

CMR: Carcinogenic, Mutagenic and Reprotoxic

COD: Chemical Oxygen Demand

COV: Volatile Organic Compound

CSA: Chemical Safety Assessment

CSR: Chemical Safety Report

DMEL: Derived Minimal Effect Level

DNEL: Derived No Effect Level.

DPD: Dangerous Preparations Directive

DSD: Dangerous Substances Directive

EC50: Half Maximal Effective Concentration

ECHA: European Chemicals Agency

EINECS: European Inventory of Existing Commercial Chemical Substances.

ES: Exposure Scenario

GefStoffVO: Ordinance on Hazardous Substances, Germany.

GHS: Globally Harmonized System of Classification and Labeling of Chemicals.

IARC: International Agency for Research on Cancer

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

IC50: half maximal inhibitory concentration ICAO: International Civil Aviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).

IMDG: International Maritime Code for Dangerous Goods. INCI: International Nomenclature of Cosmetic Ingredients.

IRCCS: Scientific Institute for Research, Hospitalization and Health Care

KAFH: KAFH

KSt: Explosion coefficient.

LC50: Lethal concentration, for 50 percent of test population.

LD50: Lethal dose, for 50 percent of test population.

LDLo: Leathal Dose Low N.A.: Not Applicable N/A: Not Applicable

N/D: Not defined/ Not available

NA: Not available

NIOSH: National Institute for Occupational Safety and Health

NOAEL: No Observed Adverse Effect Level

OSHA: Occupational Safety and Health Administration.

PBT: Persistent, Bioaccumulative and Toxic

PGK: Packaging Instruction

PNEC: Predicted No Effect Concentration.

PSG: Passengers

RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.

STEL: Short Term Exposure limit. STOT: Specific Target Organ Toxicity.

TLV: Threshold Limiting Value.

TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).

vPvB: Very Persistent, Very Bioaccumulative.

WGK: German Water Hazard Class.

Paragraphs modified from the previous revision:

- 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING
- 2. HAZARDS IDENTIFICATION
- 3. COMPOSITION/INFORMATION ON INGREDIENTS
- 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
- 9. PHYSICAL AND CHEMICAL PROPERTIES
- 11. TOXICOLOGICAL INFORMATION
- 12. ECOLOGICAL INFORMATION
- 14. TRANSPORT INFORMATION
- 15. REGULATORY INFORMATION
- 16. OTHER INFORMATION