

SAFETY DATASHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Important Note: As a solid, manufactured article, exposure to hazardous ingredients is not expected with normal use. The information contained in this Safety Data Sheet contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

Commercial product name

INR21700-41J (Contained in product model Q.SAVE-G2 6.3kWh B1.1.1)

Use of the substance / preparation

Lithium-ion batteries

Synonyms

Lithium-ion Cell, Lithium-ion Battery, Li-Ion Cell, Li-Ion Battery

Manufacturer

Hanwha Solutions Corporation 23F 24F, 86, Cheonggyecheon-ro, Jung-gu, Seoul 04541, Korea

Supplier

Hanwha Q CELLS Australia Pty Ltd Suite 1, Level 1, 15 Blue Street, North Sydney, NSW 2060, Australia Tel: +61 (2) 9016 3033

Emergency Contact

Poisons Information Line: 13 11 26 (24 hours a day, 7 days a week in Australia) In the case of an emergency, dial 000 immediately

Further Information

Battery-System: Lithium-ion (Li-ion) Nominal Voltage: 202.7VDC Rated Capacity: 31.095 Ah kWh rating: 6.3kWh

Anode (negative electrode): based on intercalation graphite

Cathode (positive electrode): based on lithiated metal oxide (Cobalt, Nickel, Manganese)

Remark:

The information and recommendations set forth are made in good faith and believed to be accurate as of the date of preparation. Hanwha Q CELLS Australia Pty Ltd. makes no warranty, expressed or implied, with respect to this information and disclaims all liabilities from reliance on it.

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

Preparation Hazards and Classification: Pursuant to Australian Work Health and Safety Regulations, the product is a Lithium ion cell or battery and is therefore classified as an article and is not hazardous when used according to the recommendations of the manufacturer. The hazard is associated with the contents of the cell or battery. Under recommended use conditions, the electrode materials and liquid electrolyte are non-reactive provided that the cell or battery integrity remains and the seals remain intact. The potential for exposure should not exist unless the cell or battery leaks, is exposed to high temperatures or is mechanically, electrically or physically abused / damaged. If the cell or battery is compromised and starts to leak, based upon the battery ingredients, the contents are classified as Hazardous.

Hazard Summary

Physical hazards: Not classified for physical hazards.

 $\textbf{Health hazards:} \ Not \ classified \ for \ health \ hazards.$

Environmental hazards: Not classified for hazards to the environment.

Specific hazards: Exposure to contents of an open or damaged cell or battery: contact with this material will cause burns to the skin, eyes and mucous membranes. May cause sensitization by skin contact.

Main Symptoms: Symptoms include itching, burning, redness and tearing.

Hazardous Materials Information Label (HMIS)

Health: 0 Flammability: 1 Physical Hazard: 0

NFPA Hazard Ratings

Health: 0 Flammability: 1 Reactivity: 0 Unique Hazard:

GHS precautionary statements

Precautionary Statement(s) Prevention	P102: Keep out of reach of children. P103: Read label prior to use. P202: Do not handle until all safety precautions have been read and understood. P210: Keep away from heat / sparks / open flames / hot surfaces – No smoking. P234: Keep only in original container. P254: Wash hands thoroughly after handling.: Keep out of reach of children.
Response (If cell/battery leaks)	P260: Do not breathe vapor or spray. P280: Wear protective gloves / protective clothing / eye protection / face protection. P301/330/331: FSWALLOWED: Rinse mouth. DO NOT induce vomiting. P3033/361/353: IF ON SKIN (or hair): Remove / Take off immediately all contaminated clothing. Rinse skin with water / shower. P304/340: If INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P305/351/338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310: Immediately call a POISON CENTER or doctor / physician. P363: Wash contaminated clothing before reuse. P370: In case of fire: Use carbon dloxide, dry chemical or water extinguisher.
Storage (Store as indicated in Section 7)	P402: Store in a dry place. P405: Store locked up. P410: Protect from sunlight.
Disposal	P406: Store any spilled /leaking electrolyte material in a corrosive resistant container with a resistant inner liner. P501: Dispose of batteries in accordance with applicable hazardous waste regulations.

Other Hazards

Appearance, Color and Odor: Solid object with no odor.

Primary Routes(s) of Exposure: These chemicals are contained in a sealed enclosure. Risk of exposure occurs only if the cell or pack is mechanically, thermally, electrically or physically abused to the point of compromising the enclosure. If this occurs, exposure to the electrolyte solution contained within can occur by inhalation, ingestion, eye contact and skin contact.

Potential Health Effect(s):

Acute (short term): see Section 8 for exposure controls.

In the event that this cell or pack has been ruptured, the electrolyte solution contained within the cell would be corrosive and can cause burns to skin and eyes.

Inhalation: Inhalation of materials from a sealed cell is not an expected route of exposure. Vapors or mists from a ruptured cell may cause respiratory irritation.

Ingestion: Swallowing of materials from a sealed cell is not an expected route of exposure. Swallowing the contents of an open cell can cause serious chemical burns to mouth, esophagus, and gastrointestinal tract.

Skin: Contact between the cell and skin will not cause any harm. Skin contact with the contents of an open cell can cause severe irritation or burns to the skin.

Eye: Contact between the cell and the eye will not cause any harm. Eye contact with the contents of an open cell can cause severe irritation or burns to the eye.

CHRONIC (long term): see Section 11 for additional toxicological data.

Interactions with other chemicals: Immersion in high conductivity liquids may cause corrosion and breaching of the cell or battery enclosure. The electrolyte solution inside of the cells may react with alkaline (basic) materials and present a flammability hazard.

Potential Environmental Effects: Not Available.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Mixture

CAS No.	EC No.	REACH Registration No.	% (Weight)	Name	Common Name (Synonyms)	Classification according to Regulation (EC) No 1278/2008 (CLP)
12325-84-7	Not available	-	10~20	Litium ni- ckel oxide	Li2NiO2	Not classified
7440-44-0	231-153-3	-	10~20	Carbon	Carbon activated	Not classified
7439-89-6	231-096-4	-	10~20	Iron	Fe	Not classified
7440-50-8	231-159-6	-	5~15	Copper	Cu	Acute Tox. 4, H302
						Eye Irrit. 2, H319 Acute Tox. 3, H331 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
12031-65-1	620-400-4	-	1~10	Lithium nickel dioxide	Lithium nickelate	Skin Sens. 1, H317 STOT RE 1, H372 ** Carc. 1A, H350i
7429-90-5	231-072-3	-	1~10	Aluminium	Al	Pyr. Sol. 1, H250 Water-react. 2, H261(pyrophoric) Flam. Sol. 1, H228 Water-react. 2, H261(stabilised)



12190-79-3	235-362-0	-	1~10	Cobalt lithium dioxide	Lithium cobaltite	Not classified
616-38-6	210-478-4	-	1~10	Dimethyl carbonate	Carbonic acid dimethyl ester	Flam. Liq. 2, H225
12057-17-9	601-724-5	-	1~10	Lithium Manganese (III,IV) oxide	LiMn2O4	Not classified
9002-88-4	618-339-3	-	1~10	Polyethy- lene	Ethene, homo- polymer	Not classified
96-49-1	202-510-0	=	1~3	Ethylene carbonate	1,3-Dioxolan- 2-one	Not classified
21324- 40-3	244-334-7	-	1~3	Lithium hexaflu- orophos- phate(1-)	ithium hexaflu- orophosphate	Not classified
7782-42-5	231-955-3	-	1~3	Graphite	Grafito	Not classified
623-53-0	433-480-9	=	1~3	Ethyl methyl carbonate	EMC	Not classified
7440-02-0	231-111-4	-	0.1~0.99	Nickel	Ni	Skin Sens. 1, H317 Carc. 2, H351 STOT RE 1, H372 Aquatic Chronic 3, H412
25640- 14-6	607-767-6	-	0.1~0.99	1,4-Ben- zenedi- carboxylic acid, 1,4-dime- thyl ester, polymer with 1,4-cy- clohexa- nedime- thanol and 1,2-etha- nediol	1,2 ethanediol	Not classified
9003-07-0	618-352-4	-	0.1~0.99	1-Propene, homopoly- mer	Polypropylene	Not classified
26023-21-2	631-079-5	-	0.1~0.99	Poly[N,N'- (1,4- phenylene)- 3,3',4,4'- benzo- phenone- tetracarbo- xylic imide/ amic acid]	lmide resin	Not classified
554-13-2	209-062-5	-	0.1~0.99	Lithium carbonate	Carbonic acid, dilithium salt	Not classified
1333-86-4	215-609-9	-	0.1~0.99	Carbon black	Carbon	Not classified
9003-55-8	618-370-2	-	0.1~0.99	1,3 Butadi- ene/styrene copolymers	Styrene, butadiene copolymer	Not classified
26337- 35-9	Not available	-	0.1~0.99	Acetic acid ethenyl es- ter, polymer with carbon monoxide and ethene	Not available	Not classified
9004-32-4	618-378-6	-	0.1~0.99	Carbo- xymethyl cellulose sodium salt	Cellulose, carboxymethyl ether, sodium salt	Not classified
110-61-2	203-783-9	-	0.1~0.99	Succino- nitrile	Butanedinitrile	Not classified
11089- 89-7	Not available	-	0.1~0.99	Aluminum lithium oxide (AlLiO)	Not available	Not classified

Further Information

Because of the cell structure the dangerous ingredients will not be available if used properly. During charge process a lithium graphite intercalation phase is formed.

4. FIRST AID MEASURES

Description of first aid measures

Following eye contact:

Rinse eyes with plenty of water for at least $15\,\mathrm{minutes}$ and seek medical attention.

Following skin contact:

Remove contaminated clothing and wash before reuse. Immediately rinse contact area with plenty of clean water. Provide first aid to contacted area to prevent infection. Get medical attention. Following inhalation:

In case of inhalation of organic electrolyte mist, remove from exposure to fresh air. If necessary give oxygen. Get medical attention.

Following ingestion:

In case of ingestion of electrolyte don't induce vomiting. If patient is conscious and alert give 2~4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Further Information:

The following first aid measures are required only in case of exposure to interior battery components after damage of the external battery casing. Undamaged, closed cells do not represent a danger to the health.

Most important symptoms and effects, both acute and delayed

Acute effects: Not available Delayed effects: Not available

Indication of immediate medical attention and special treatment needed

Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

5. FIRE FIGHTING MEASURES

Extinguishing media

When the scale of the fire is small, use a HFC (hydrofluorocarbon) clean-agent fire extinguisher or alcohol resistant foam fire extinguishers. (In case of battery overheating, wear protective gear and immerse heated battery in water). In case of large fire, use large amount of water to extinguish.

Special hazards arising from the substance or mixture

Flammable gas leaks before ignition and then the product ignites. Accidental Release Measures

Advice for firefighters

The ignited battery has a high temperature, so there is a risk of additional ignition even if the fire is extinguished at early stage. Sprinkle a large amount of water until the battery temperature drops to normal temperature. If the battery is ignited in multi-stacked condition, multi-stack should be disassembled and then extinguished so that heat is not transferred between batteries. In the event of a battery fire, cool it by spraying water directly on the battery. When handling a overheated battery, wear heat-resistant protective equipment.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures For non-emergency personnel

Protective equipment: Use personal protective equipment, see Section 8

Emergency procedures: In case of cell damage, possible release of dangerous substances and a flammable gas mixture. Eliminate all ignition sources. Please note that materials and conditions to avoid. Battery may emit electrolyte if charging or discharging rates exceed manufacturer's recommendations or if pack has been breached. Move battery to well ventilated area to prevent gas accumulation.

For emergency responders

Eliminate all ignition sources. Please note that materials and conditions to avoid. Move battery to well ventilated area to prevent gas accumulation.

Environmental precautions:

Avoid release to the environment. Prevent entry into waterways, sewers, basements or confined areas.

Methods and material for containment and cleaning up

For containment: Not available

For cleaning up: Cover with Dry earth, DRY sand or other non-combustible material and put on the plastic sheet to minimize spreading or contact with rain. Move battery to well ventilated area to prevent gas accumulation. Dispose in accordance with applicable local, state and federal regulations.

Other information: Not available

Reference to other sections

See also sections 8 and 13 of the Safety Data Sheet.

7. HANDLING AND STORAGE

Precautions for safe handling

In case of cell damage, possible release of dangerous substances and a flammable gas mixture. The battery stores electrical energy and is capable of rapid energy discharge. Battery cell contents are under pressure. Handle battery carefully to avoid puncturing case or electrically shorting terminals.

Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions: Not available

Packaging materials: Not available

Requirements for storage rooms and vessels:

Storage at room temperature (approx. $20\,^\circ\text{C})$ at approx. $40\,\%$ of the nominal capacity Keep in closed original container.

Specific end use(s)

Recommendations: Not available

Industrial sector specific solutions: Not available



8. EXPOSURE CONTROLS

Appropriate engineering controls:

Substance / mixture related measures to prevent exposure during identified uses:

Avoid charging batteries in areas where hydrogen gas accumulate. Use local exhaust ventilation to maintain concentrations of hydrogen below the Lower Explosive collect and transport flammable gases in ventilation systems. Insure proper ventilation is present and electrolyte mist and vapours.

Structural measures to prevent exposure:

Avoid charging batteries in areas where hydrogen gas accumulate. Use local exhaust ventilation to maintain concentrations of hydrogen below the Lower Explosive collect and transport flammable gases in ventilation systems. Insure proper ventilation is present and electrolyte mist and vapours.

Organisational measures to prevent exposure: Not available

Technical measures to prevent exposure: Insure proper ventilation is present and electrolyte mist and vapours.

Individual protection measures, such as personal protective equipment :

Eye and face protection

Wear ANSI approved safety glasses with side shield during normal use. Wear NIOSH approved face shield with safety glasses and H.V protection during intentional disassembly.

Skin protection

Hand protection

Wear nitrile butyl rubber, neoprene, or PVC glove during battery component disassembly. Discard contaminated work clothing after one work day.

Other skin protection

Wear protective clothing during battery component disassembly. Discard contaminated work clothing after one work day.

Respiratory protection:

None required during normal use. Wear NIOSH or European Standard EN 149 approved full or half face piece (with goggles) respiratory protective equipment when necessary. In lack of oxygen (<19.5%), wear the supplied-air respirator or self-contained oxygen breathing apparatus. In case exposed to particulate material, the respiratory protective equipment as follow are recommended; facepiece filtering respirator or air-purifying respirator, high-efficiency particulate air (HEPA) filter media or respirator equipped with powered fan, filter media of use (dust, mist, fume)

Environmental exposure controls

Substance / mixture related measures to prevent exposure: Not available

Instruction measures to prevent exposure: Not available
Organizational measures to prevent exposure: Not available
Technical measures to prevent exposure: Not available

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance
Physical state: Solid
Color: Various
Odor: Odorless

Important health, safety and environmental information

Test method pHValue: n.a. Flash point: n.a

Lower explosion limits: n.a. Vapour pressure: n.a. Density: n.a.

Water solubility: Insoluble

10. STABILITY AND REACTIVITY

Reactivity

Stable at ambient temperature.

Chemical stability

There is no hazard when the measures for handling and storage are followed.

Stable under normal temperatures and pressures.

Possibility of hazardous reactions

Will not occur under normal conditions.

In case of cell damage, possible release of dangerous substances and a flammable gas mixture.

Containers may explode when heated.

Fire may produce irritating and/or toxic gases. - Inhalation of material may be harmful.

Conditions to avoid

Keep away from heat/sparks/open flames/hot surfaces. No smoking.

Friction, heat, sparks or flames

Dusts or shavings from borings, turnings, cuttings, etc.

Do not exceed manufacturer's recommendation for charging or use battery for an application for which it was not specifically designed.

Do not electrically short.

Incompatible materials

Avoid contact with acids and oxidizers.

Keep away from any possible contact with water, because of violent reaction and possible flash fire. Handle under inert gas. Protect from moisture.

Combustibles, reducing agents

Hazardous decomposition products

- None under normal conditions
- Corrosive and/or toxic fume
- Material may produce irritating and highly toxic gases from decomposition by heat and combustion during burning.
- Irritating and / or toxic gases

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects:

The hazardous components of the cell or battery are contained within a sealed unit. Under recommended use conditions, the electrode materials and liquid electrolyte are non-reactive provided that the cell or battery integrity remains and the seals remain intact. The potential for exposure should not exist unless the battery leaks, is exposed to high temperature or is mechanically, electrically or physically abused / damaged. The following toxicology data is in respect to if a person comes into contact with the electrolyte.

Acute Toxicity:

Swallowed: The electrolyte contained within the cell or battery is a corrosive liquid. Ingestion of this electrolyte would be harmful. Swallowing may result in nausea, vomiting, diarrhea, abdominal pain and chemical burns to the gastrointestinal tract. During normal usage ingestion should not be a means of exposure.

Eye: The electrolyte contained within the cell or battery is a corrosive liquid and it is expected that it would cause irreversible damage to the eyes. Contact may cause corneal burns. Effects may be slow to heal after eye contact. Correct handling procedures incorporating appropriate eye protection should minimize the risk of eye irritation.

Skin: The electrolyte contained within the cell or battery is a corrosive liquid and it is expected that it would cause skin burns or severe irritation to the skin if not washed off immediately. Correct handling procedures should minimize the risk of skin irritation. People with pre-existing skin conditions, such as dermatitis, should take extreme care so as not to exacerbate the condition.

Inhaled: Inhalation of vapors from a leaking cell or battery is expected to cause severe irritation of the mouth and upper respiratory tract with a burning sensation, pain, burns and inflammation in the nose and throat; there may also be coughing or difficulty breathing.

Skin Corrosion / Irritation: The electrolyte contained within the cell or battery is classified as a corrosive liquid and is expected to exhibit Dermal Corrosivity / Irritation.

Serious Eye Damage / Irritation: The electrolyte contained within the cell or battery is classified as a corrosive liquid and is expected to exhibit serious Damage / Corrosivity.

Respiratory or Skin Sensitization: The electrolyte contained within the cell or battery is not expected to be a skin sensitizer according to OECD test 406, based on the available data and the known hazards of the components. The electrolyte contained within the battery is not expected to be a respiratory tract sensitizer, based on the available data and the known hazards of the components.

Germ Cell Mutagenicity: The electrolyte contained within the cell or battery is not expected to be mutagenic according to test such as OECD tests 471, 475, 476, 478 and 479, based on the available data and the known hazards of the components.

Carcinogenicity: The electrolyte contained within the cell or battery is not expected to be a carcinogen. The cathode contains Cobalt and Nickel components. These components are classified as IARC 2B – possibly carcinogenic to humans, however they do not pose a threat when contained in the cell or battery sealed unit.

Reproductive Toxicity: The electrolyte contained within the cell or battery is not expected to be a reproductive hazard according to test such as OECD tests 414 and 421, based on the available data and the known hazards of the components.

Specific Target Organ Toxicity (STOT) – Single Exposure: The electrolyte contained within the cell or battery is corrosive and is expect to cause respiratory irritation by inhalation. Inhalation of vapors may lead to severe irritation of the mouth and upper respiratory tract with a burning sensation, pain, burns and inflammation in the nose and throat; there may also be coughing or difficulty breathing.

Specific Target Organ Toxicity (STOT) – Repeated Exposure: The cells or batteries are not expected to cause organ damage from prolonged or repeated exposure according to tests such as OECD tests 410 and 412, based on the available data and the known hazards of the components. Aspiration Hazard: The cells or batteries are not classified as an aspiration hazard, based on the available data and the known hazards of the components. However, due to the corrosive nature of the product if swallowed, do NOT induce vomiting. If vomiting has occurred after ingestion the person should be observed to ensure that aspiration into the lungs has not occurred and assessed for chemical burns to the gastrointestinal and respiratory tracts.

12. ECOLOGICAL INFORMATION

Further information

Ecological injuries are not known or expected under normal use. Do not flush into surface water or sanitary sewer system.

13. DISPOSAL CONSIDERATIONS

Product / Packaging disposal

Consider the required attentions in accordance with waste treatment management regulation.

Waste treatment-relevant information

Waste must be disposed of in accordance with federal, state and local environmental control regulations

Sewage disposal-relevant information: Not available Other disposal recommendations: Not available .



UN Proper shipping name: LITHIUM ION BATTERIES (including lithium ion polymer batteries)

Transport Hazard class: 9 Packing group: II

Special provisions: 188, 230, 384 Packing instructions: P903 Environmental hazards: No.

Special precautions for user in case of fire: F-A

In case of leakage: S-I

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not Available

IATA Transport: PI 965-Section IA

Package labels:



15. REGULATORY INFORMATION

Canadian Federal Regulations:

These products have been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

WHMIS Classification: Not Controlled, manufactured article.

New Substance Notification Regulations: Lithium hexafluorophosphate is listed on the Non-Domestic Substance List (NDSL). All other ingredients in the product are listed, as required, on Canada's Domestic Substances List (DSL).

National Pollutant Release Inventory (NPRI) Substances: These products do not contain any NPRI chemicals.

United States Federal and State Regulations:

TSCA Status: All ingredients in these products are listed on the TSCA inventory.

OSHA: These products do not meet criteria as per Part 1910.1200, manufactured article. SARA EPA Title III: None.

Sec. 302/304: None. Sec. 311/312: None. Sec. 313: None. CERCLA RQ: None.

Australia and New Zealand:

SUSMP: Not applicable

AICS: All ingredients are on the AICS list. HSNO Approval number: Not applicable **HSNO Group Title:** Not applicable

NOHSC: 10008 Risk Phrases: R34 - Causes Burns.

NOHSC: 1008 Safety Phrases:

S1 - Keep locked up.

S2 - Keep out of reach of children.

S23 - Do not breathe vapor.

S24 / 25 - Avoid contact with skin and eyes.

S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical

S27/28 - After contact with skin, take off immediately all contaminated clothing and wash immediately with plenty of water.

S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection.

S56 - Dispose of this material and its container at hazardous waste or special waste collection point.

S62 - If swallowed, DO NOT induce vomiting: seek medical advice immediately and show this container or label

S64 - If swallowed, rinse mouth with water (Only if the person is conscious).

EC Classification for the Substance / Preparation:

These products are not classified as hazardous according to Regulation (EC) No. 1272/2008. Keep out of reach of children.

EU Restrictions on use:

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended: Aluminium (CAS 7429-90-5)

Other EU Regulations

This Safety Data Sheet complies with the requirements of Regulation (EC) No. 1907/2006.

Japanese Regulations

Japanese Industrial Standards (JIS) JIS Z 7253:2012 Waste disposal and public cleaning law

Law for Promotion of Effective Utilization of Resources

Taiwanese Regulations

Regulation of Labelling and Hazard Communication of Dangerous and Harmful Materials: Labeling requirements and other relevant provision of chemicals, this product is not classified as dangerous goods. Toxic Chemicals Substance Control Law: Not Listed. CNS 1030016 Safety of primary and secondary lithium cells and batteries during transport.

Chinese Regulations

General Rule for Classification and Hazard Communication of Chemicals (GB 13690-2009): Specifies the classification, labeling and hazard communication of chemicals in compliance with the GHS standard for chemical production sites and labeling of consumer goods. General Rule for Preparation of Precautionary Labels for Chemicals (GB 15258-2009): Specifies the relevant application methods of precautionary labels for chemicals. Safety Data Sheet for Chemical Products Content and Order of Sections (GB/T 16483-2008)

16. OTHER INFORMATION

Further Information

Data of sections 4 to 8, as well as 10 to 12, do not necessarily refer to the use and the regular handling of the product (in this sense consult package leaflet and expert information), but to release of major amounts in case of accidents and irregularities. The information describes exclusively the safety requirements for the product(s) and is based on the present level of our knowledge. This data does not constitute a guarantee for the characteristics of the product(s) as defined by the legal warranty regulations. "(n.a. = not applicable; n.d. = not determined)" The data for the hazardous ingredients were taken respectively from the last version of the subcontractor's safety data sheet.