



MATERIAL SAFETY DATA SHEET

NOVINOX® ACE 20

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According to the 99/45/EC directive, REACH and CLP regulations EC N° 1907/2006 - 1272/2008

1. IDENTIFICATION OF THE MATERIAL AND OF THE COMPANY

Trade name / Mixture Name: NOVINOX ACE 20

(IUPAC: trizinc bis(orthophosphate) 90%)

REACH Registration number: 01-2119485044-40-0001 90%, 01-2119490076-36-0003 10%

Type of use : anticorrosive pigment (solid corrosive inhibitor) for paints.(see section 16)

Manufacturer : SOCIETE NOUVELLE DES COULEURS ZINCIQUES

Plant

BP 59
59111 Bouchain
FRANCE

Sales department

45/49 Chaussée Jules César
95250 Beauchamp
FRANCE

Tel : + 33.1.30.40.57.57

Fax : + 33.1.39.60.78.34

E.mail : sncz@sncz.net msds@sncz.net

MSDS contact : msds@sncz.net

Europe emergency contact : + 33 1 30 40 57 57 (France).

24-hour emergency number (USA) : 800 424 9300 (CHEMTREC - USA).

24-hour international emergency number : + 1 703 527 3887 (CHEMTREC - USA).

2. HAZARD IDENTIFICATION

Product description: NOVINOX ACE 20 is a mixture/ preparation of zinc phosphate and a non hazardous additive. NOVINOX ACE 20 is not submitted to classification (criteria not met).

Danger : None for humans and for the environment.

Labelling according to 1999/45/EC directive and 1272/2008/EC regulation: none. Mixture no submitted to classification.

Classification system: The classification of this mixture/ preparation as a whole entity "NOVINOX ACE 20" provided by SNCZ is based on relevant information obtained on the mixture itself "NOVINOX ACE 20". Appropriate tests were conducted in accordance with:

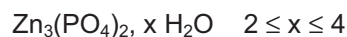
- Article 6.1.1a) of Regulation 1272/2008/EC
- Article 7 b) of Directive 1999/45/EC (§12)
- GHS 2009 chapter 1.3.2.3 a) and part 4.1: Hazardous to the aquatic environment

This mixture (1272/2008/EC and 1999/45/EC) contains 90% zinc phosphate. Due to formulation, and appropriate tests data the NOVINOX ACE 20 does not meet the criteria for classification [GHS/CLP part 4.1 of the hazards to the aquatic environment as defined in the Global Harmonized System (GHS) and the CLP regulation 1272/2008/EC (see chapter 12)]. This mixture must be considered as a "whole entity" similar to a substance on the base of tests results.

Other specific information to substance derived from EC classification of substances (see chapter 3).

3. COMPOSITION/DATA ON COMPONENTS

Chemical composition : ∇ Mixture containing 90% of Zinc Phosphate and 10% of a non hazardous additive. This mixture NOVINOX ACE 20 is not subjected to classification and labelling (see chapter 12). However, this mixture which is not submitted to classification, is based on zinc phosphate which is a classified hazardous substance (CLP 1272/2008/EC Annex VI).

**□ REACH Registration number:**

- 01-2119485044-40-0001 90%
- 01-2119490076-36-0003 10%

Hazardous components/impurities : (1) regulation 1272/2008/EC (2) directive 67/548/EEC

<u>N°CAS</u>	<u>Annex VI Index N°</u>	<u>EINECS N°</u>	<u>Name</u>	<u>%</u>	<u>Phrases</u>	<u>Symbol</u>
7779-90-0	030-011-00-6	231-944-3	Zn ₃ (PO ₄) ₂ , xH ₂ O zinc phosphate	90	H400 H410 (1) R50/53 (2)	GHS09 N

∇ Environmental Risk : Zinc phosphate substance is very dangerous to aquatic organisms, may cause long-term adverse and lasting effects in the aquatic environment. It is highly recommended not to allow this product to enter the environment.

4. FIRST AID AND MEASURES

□ Description of first aid measures : Get immediately medical attention.

Specific measure: no specific requirements.

After inhaling : remove from exposure area to fresh air. Seek medical attention.

After skin contact : wash with mild soap and water until no evidence of material remains.

After eyes contact : immediately flush eyes with water for at least 15 min, until no evidence of chemical remains. Seek medical attention if necessary.

After ingestion : rinse mouth with water. Immediately get medical attention. Treat symptomatically and supportively. This product may induce intestinal troubles.

□ Most important symptoms and effects, both acute and delayed: No further relevant information available.

□ Indication of any immediate medical attention and special treatment needed: No further relevant information available.

5. FIRE FIGHTING MEASURES

∇ Suitable extinguishing means : no restriction for neighbouring fire.

∇ Specific hazards arising from the mixture : not flammable product. In case of fire, we recommend to consider NOVINOX ACE 20 as very toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment. Do not let this product and its solutions contaminate the environment.

5. FIRE FIGHTING MEASURES (continued)

Advise for firefighters

Special personal protection equipment : wear an appropriate air respirator and an appropriate equipment.

Conduct of fire fighting : no specific requirement (not flammable fire retardant). Avoid creating dust under nuisance dust permitted limits. In case of fire, residues may contaminate the environment and have to be collected and stocked in special containers. Contaminated wastes have to be collected by a licensed contractor. Dike and contain, fire-control water, for later disposal. Do not let contaminated water contaminate the environment.

Additional information : contaminated residues must be disposed of according to local regulations.

6. ACCIDENTAL RELEASE MEASURES

General consideration: Although NOVINOX ACE 20 is not classified towards the aquatic environment, we recommend applying zinc phosphate safety measures. As much as possible, do not let this material contaminate the environment.

Personal protective measures : If dusting (upper permitted limits) mask with a high-efficiency particulate filter and with a full face-piece.

Environmental protection conduct : Do not sweep or wash in public stretches of water or unknown discharge, in respect with local regulations. To prevent dispersion on the floor and later in the environment, it is highly recommended to forbid walking on the product spillage. Do not discharge contaminated water in public sewage.

Methods and material for containment and cleaning up

Spill and leak procedure : Avoid/minimise residues and waste production according to local regulations. Use wet clean up technique to avoid dusting. Keep covered material in watertight and closed containers. Suck up avoiding dust (vacuum or wet device). Eliminate residues according to local regulations (dangerous waste).

Soil: Remove containers from spill area. In large spills, rescue must be in the same direction as the wind and prohibit the formation of dust clouds. Collect spills on the floor; eliminate waste according with national regulations.

Water: Not contaminate the environment. Seal the manhole sewer, prohibit access to water contaminated with this product in water systems and contain the water in area water resistant to removal by an authorized company

7. HANDLING AND STORAGE

General recommendation: Although NOVINOX ACE 20 is not classified towards the aquatic environment, we recommend applying zinc phosphate storage rules. As this product is not classified, NOVINOX ACE 20 does not enter in the field of SEVESO regulation.

Precautions for safe handling:

EC:

Handling: do not breathe dust. Keep away from food stuff. Use adequate exhaust ventilation to maintain nuisance dust below permitted limits. Suck up avoiding dust (vacuum or wet device). Avoid residues according to local regulations.

Protection against fire and explosion : the product is non-flammable. Take precautionary measures against electrostatic discharges in explosive area.

7. HANDLING AND STORAGE (continued)
 Conditions for safe storage, including any incompatibilities:

Storage conditions : store under clean, dry conditions at room temperature. Keep containers tightly sealed.

Material/Chemical incompatibility : none. However, it is recommended to store this material away from acids alkali and ammonia (solubility in these solvents).

8. EXPOSURE CONTROLS/PERSONAL PROTECTION
 PROFESSIONAL EXPOSURE CONTROL

EXPOSURE LIMIT VALUE (Occupational Exposure Limits) : Total dust, Zinc

Engineering controls : no specific exposure limits established for substances (OSHA, ACGIH, NIOSH). Cf §7.

Parameters of exposure controls : Total dust

<u>Designation</u>	<u>Type of Data</u>	<u>Unit</u>
Total dust (no special effect)	ACGIH-91/93 TLV : TWA (USA) MAK (Germany)	10 mg/m ³ 6 mg/m ³ Valid as per (mm/yy) : 05 / 95
	<input type="checkbox"/> VME France 8H <input type="checkbox"/> VME France 8H	10 mg/m ³ 5 mg/m ³ respirable dust

Parameters of exposure controls : ZnO – group : slightly soluble Zn compounds
(as ZnO – Zn(OH)₂ – Zn₃(PO₄)₂ – ZnCO₃ – Zn metal - ZnS

<u>Designation</u>	<u>Type of Data</u>	<u>Unit</u>
ZnO	ACGIH-91/93 USA OSHA (1989)(legal limit values) DFG (1997) (Germany) Arbejdstilsynet (1992) Denmark VME France SZW (1997) Netherland HSE (1998) UK NBOSHS (1993) Suede	10 mg/m ³ 5 mg/m ³ respirable dust 6 mg/m ³ 10 mg/m ³ 10 mg/m ³ 10 mg/m ³ 5 mg/m ³ fumes 10 mg/m ³ 5 mg/m ³ fumes

 OCCUPATIONAL EXPOSURE MANAGEMENT:

Zn Risk management minimizing, needs an 8 hours time weighted average exposure below the DNEL in occupational workplaces. In order to perform a real exposure on workplace, it is recommended to:

- Keep under control Zn nuisance dust exposure,
- Determine the accurate working time per shift,
- Choose appropriate Personal protective equipment (Respiratory Protective device...) with accurate safety factor.

After calculation, Risk Characterisation Ratio (RCR) must be below than 1 for safe operating conditions. For more information see extended safety data sheet.

The DNELs for inhalation derived under REACH for both groups are: (Inhalable fraction – Workers)

- DNEL_{inhal soluble Zn (worker)} = 1 mg Zn/m³;
- DNEL_{inhal insoluble Zn (worker)} = 5 mg Zn/m³;

8. EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)**PERSONAL PROTECTIVE EQUIPMENT**

The GES for trizinc bis(orthophosphate) production mentions the following in this respect:

- Wearing of gloves and protective clothing is compulsory (efficiency $\geq 90\%$).
- With normal handling, no respiratory personal protection (breathing apparatus) is necessary. If risk for exceedance of OEL/DNEL, use e.g.:
 - dust filter-half mask P1 (efficiency 75%)
 - dust filter-half mask P2 (efficiency 90%)
 - dust filter-half mask P3 (efficiency 95%)
 - dust filter-full mask P1 (efficiency 75%)
 - dust filter-full mask P2 (efficiency 90 %)
 - dust filter-full mask P3 (efficiency 97.5%)
- Eyes: safety glasses are optional
- Information-training of the workers and their staff and line managers focused on careful hygiene behaviour.

Respiratory protection : Adapted dust mask while handling the powder (for example FFP2). If possible, use a full face piece mask (upper permitted limits) when dust occurs.

Hand protection : Use gloves during handling.

Eye protection : Safety glasses with side shields (for example EN166).

Skin protection : Wear appropriate clothing to avoid any contact with skin.

Clothing: Employee must wear appropriate protective (impervious) clothing and equipment to prevent from any possibility of skin contact with this product.

Other protective equipment/recommendations : Observe good personal hygiene. Keep away from food stuff, drinks on the site. Wear appropriate working clothing.

ENVIRONMENT PROTECTIVE MEASURES

Note: NOVINOX ACE 20 is a mixture:

- Of a hazardous substance subjects to risk control measures (zinc phosphate) and
- A non hazardous additive for which there is no obligation to provide measures to control risks

As this product is not classified towards the aquatic environment, risk control measures do not seem mandatory. However, it is prudent to apply the risk control measures of zinc phosphate.

It is impervious to keep under control the zinc emissions of this product in the environment. If necessary an appropriate treatment device must be installed according to regulations.

The GES for trizinc bis(orthophosphate) production mentions the following in this respect:

- Local exhaust ventilation systems (generic LEC (84%) as worst case; higher efficiencies (90-95%) are usual,
- Cyclones/filters (for minimizing dust emissions) : efficiency: 70-90% (cyclones), 50-80% (dust filters), 85-95% (double stage, cassette filters),
- Process enclosure, especially in potentially dusty units,
- Dust control: dust and Zn in dust needs to be measured in the workplace air (static or individual) according to national regulations,
- Special care for the general establishment and maintenance of a clean working environment by e.g :
- Cleaning of process equipment and workshop,
- Storage of packaged Zn product in dedicated zones.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Atmospheric emissions: ventilation systems must be appropriate for the level of performance required to control air emissions in accordance with current national requirements.

Water emissions: must be controlled to prevent contamination of public sewage, rivers, surface water according national and local regulations.

Soil emissions: Do not let this product to contaminate soils or ground.

PNECs for zinc

Environmental compartment	PNEC value for Zn
Freshwater	20.6* µg/L
Saltwater	6.1* µg/L
Freshwater sediment	235.6 mg/kg sediment dry weight**.
Saltwater sediment	113 mg/kg sediment dry weight**
Soil	106.8 mg/kg soil dry weight***.
STP	52 µg/L

*added value, « PNEC_{add} »

**A generic bioavailability factor of 0.5 is applied by default, according to the EU risk assessment (ECB 2008)

*** A generic bioavailability/ageing factor of 3 is applied by default (ECB 2008).

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties:

Physical state : solid, fine powder

Appearance : white powder

Odour : odourless

Change in physical state

Dehydration

80 - 600°C

Melting

900°C

Decomposition

none as long as properly used.

Flash point : not applicable.

Flammable properties : not combustible, fire retardant.

Explosion risk : not applicable.

Vapour pressure (20°C) : not applicable.

Specif gravity : 3.2 g/cm³ ISO 787/10

Solubility (water 20°C) : 0.3 g/l.

pH (20°C) : 6 - 8 ISO 787/9

others infirmations : none

Partition coefficient: n-octanol-water : not applicable

10. STABILITY AND REACTIVITY

Reactivity: unreactive with respect to materials commonly used in transport, handling and storage of industrial materials

Chemical stability: stable at room temperature and at temperatures up to 70°C (dehydration)

Possibility of hazardous reactions: None hazardous reactions if stored and handled in controlled conditions.

Conditions to avoid: Keep clear of acids and bases (solubility in these media).

Incompatible materials: No further relevant information available.

Hazardous decomposition products: no hazardous decomposition product in normal storage conditions.

11. TOXICOLOGICAL PROPERTIES

∇ **Acute toxicity of zinc phosphate** (NOVINOX ACE 20 contains 90% of zinc phosphate)

LD 50 mouse intraperitoneal: 522 mg/kg.

LD 50 oral (rat): > 5 000 mg/kg.

LC50 Inhalation Dusts and mists: >5.7 mg/L 4H (Klimisch and all 1982) based on cross-reading from zinc oxide

Additional information: With LD50 values consistently exceeding 2,000 mg/kg bw, slightly soluble compounds such as, trizinc bis(orthophosphate) (LD50 is > 5,000) show low level of acute oral toxicity, not leading to classification for acute oral toxicity.

Trizinc bis(orthophosphate) (based on cross-reading from zinc oxide) is of low acute inhalation toxicity (i.e., LC50 values of > 5.7 mg/L/4hrs), not leading to classification for acute inhalation toxicity.

Primary irritant effect:

Skin: not irritant (based on cross-reading from ZnO : Löser, 1977; Lansdown, 1991)

Eyes: not irritant (Mirbeau et al, 1999)

Respiratory tract: not irritant (based on cross-reading from ZnO: Klimish et al, 1982)

Sensitization: No sensitizing effects known (based on cross-reading from ZnO: Van Huygevoort, 1999 g,h)

Repeated dose toxicity:

• **Specific target organ toxicity (single exposure):**

No experimental or epidemiological sufficient evidence for specific target organ toxicity (single exposure) (based on cross-reading from ZnO) ; no classification for target organ toxicity (single exposure: STOT-SE required) (Heydon and Kagan, 1990; Gordon et al., 1992; Mueller and Seger, 1985 [Cited in Chemical Safety report (CSR) Trizinc bis(orthophosphate). 2010]).

• **Specific target organ toxicity (repeated exposure):**

No experimental or epidemiological sufficient evidence for specific target organ toxicity (repeated exposure) (based on cross-reading from ZnO) ; no classification for specific target organ toxicity (repeated exposure: STOT-RE required) (Lam et al, 1985, 1988; Conner et al. ,1988 [Cited in Chemical Safety report (CSR) Trizinc bis(orthophosphate). 2010]).

• **Aspiration hazard:**

Not available.

11. TOXICOLOGICAL PROPERTIES (continued)

Carcinogenicity, Germ cell mutagenicity, Reproductive toxicity (CMR): No further experimental or epidemiological evidence available.

- **Carcinogenicity**

No experimental or epidemiological evidence exists to justify classification of zinc compounds for carcinogenic activity (based on cross-reading between Zn compounds); no classification for carcinogenicity required (Chemical Safety report (CSR) Trizinc bis(orthophosphate). 2010).

- **Germ cell mutagenicity**

No biologically relevant genotoxic activity (based on cross-reading between Zn compounds); no classification for mutagenicity required (Chemical Safety report (CSR) Trizinc bis(orthophosphate). 2010).

- **Reproductive toxicity**

No experimental or epidemiological evidence exists to justify classification of zinc compounds for reproductive or developmental toxicity (based on cross-reading between Zn compounds); no classification for reproductive toxicity required (Chemical Safety report (CSR) Trizinc bis(orthophosphate). 2010).

This product is not hazardous for the human being when used properly.

12. ECOLOGICAL INFORMATION

Aquatic toxicity : ▽The aquatic toxicity of this mixture/preparation (99/45/EC directive and 1272/2008/EC) was determined in respect of OECD guidelines 201-202-203-211 according to Good Laboratory Practices (GLP) protocols. The studies sponsored by SNCZ concluded that this mixture/preparation is neither acute ecotoxic nor chronic ecotoxic.

Acute toxicity for fish (<i>Oncorhynchus mykiss</i>) OECD 203	LC50 (96 h)	> 100 mg/l.
Acute toxicity for crustacea (<i>Daphnia magna</i>) OECD 202	EC50 (48 h)	> 100 mg/l.
Acute toxicity for algae (<i>Pseudokirchneriella subcapitata</i>) OECD 201	EC50 (72 h)	> 100 mg/l.
Reproduction Test (<i>Daphnia magna</i>) chronic toxicity OECD 211	NOEC 21 days	> 1 mg/l.

According to GHS 2009 and CLP regulation 1272/2008/EC this mixture does not meet with aquatic classification and labelling criteria (regulation 1272/2008/EC Article 6 1, data generated in accordance with any of the methods referred to, in Article 8(3), on the mixture itself "NOVINOX ACE 20", and GHS 2009 chapter 1.3.2.3 a)).

This product is not hazardous for the environment when used properly, for identified uses (chapter 1).

Zinc Sediment toxicity: The chronic toxicity of zinc to sediment organisms in the freshwater was assessed based on a database containing high quality chronic NOEC/EC₁₀ values on 7 benthic species obtained under a variety of conditions. These data, outlined in the zinc phosphate CSR, were compiled in a species sensitivity distribution, from which the PNEC was derived (expressed as total Zn contained in the sediment). This PNEC is an added value, to be added on the zinc background in the sediment, see table below. For the marine sediments, a PNEC was derived using the equilibrium partitioning approach, see table below.

Zinc Soil toxicity: The chronic toxicity of zinc to soil organisms was assessed based on a database containing high quality chronic NOEC/EC₁₀ values on 18 plant species, 8 invertebrate species and 17 microbial processes, obtained under a variety of conditions. These data, outlined in the zinc phosphate CSR, were compiled in a species sensitivity distribution, from which the PNEC was derived (expressed as total Zn contained in the soil). This PNEC is an added value, to be added on the zinc background in the soil, see table below.

Zinc Toxicity to micro-organisms in STP: The PNEC for STP was derived by applying an assessment factor to the lowest relevant toxicity value: 5.2 mg Zn/l (Dutka et al., 1983)

12. ECOLOGICAL INFORMATION (continued)

Zinc Persistence and biodegradability: Zinc is an element, and as such the criterion "persistence" is not relevant for the metal and its inorganic compounds in a way as it is applied to organic substances. An analysis on the removal of zinc from the water column has been presented as a surrogate for persistence. The rapid removal of zinc from the water column is documented in the zinc phosphate CSR. So, zinc and zinc compounds do not meet this criterion, neither.

Zinc Behaviour in the environmental compartments

Bioaccumulative potential: Zinc is a natural, essential element, which is needed for the optimal growth and development of all living organisms, including man. All living organisms have homeostasis mechanisms that actively regulate zinc uptake and absorption/excretion from the body; due to this regulation, zinc and zinc compounds do not bioaccumulate or biomagnify.

Mobility in soils: For zinc (like for other metals) the transport and distribution over the different environmental compartments e.g. the water (dissolved fraction, fraction bound to suspended matter), soil (fraction bound or complexed to the soil particles, fraction in the soil pore water,...) is described and quantified by the metal partition coefficients between these different fractions. In the CSR, a solids-water partitioning coefficient of 158.5 l/kg (log value 2.2) was applied for zinc in soils (CSR zinc 2010).

Results of PBT and vPvB assessment: Zinc and zinc compounds are not PBT or vPvB.

Others lasting effects: No further relevant information available

13. DISPOSAL

Methods of waste treatment:

Material : dispose in accordance with local environmental regulations

* this preparation does not meet the definition of a hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA).

Contaminated package and containers : empty bags can be either destroyed, or recycled according to the international norms that apply.

14. TRANSPORT INFORMATION

Not classified (see chapter 2 and 12)

ADR : Not applicable. **IMDG** : Not applicable. **IATA** : Not applicable.

15. REGULATORY INFORMATION

This mixture is not subjected to labelling in accordance with 1999/45/EC directive and 1272/2008/EC regulation.

However, this preparation contains 90% of zinc phosphate which is labelled as following 1999/45/EC directive:

Symbol of danger : N, Dangerous for the environment.

R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Zinc phosphate is labelled as following 1272/2008/EC

Hazard for aquatic environment, Pictogram and signal word code GHS09 Warning, Hazard statement H410

H410: Very toxic to aquatic life with long lasting effects.

Due to its non hazardous nature, NOVINOX ACE 20 is not subject to any storage restriction.

Chemical safety assessment: Chemical safety report were performed for all ingredients included in NOVINOX ACE 20 (see chapter 16)

16. FURTHER INFORMATION

- **TOTAL LEAD** : < 0,1 %

- **SOLUBLE LEAD (HCl 0,07 N)** : < 0,1 %

EC :

Preparation/mixture labelling : This product is not subjected to labelling and classification.

Storage: Due to non classification NOVINOX ACE 20 is not subjected to any storage restriction rule.

Risk management measures:

The NOVINOX ACE 20 is a mixture:

- Of a hazardous substance subjects to risk control measures (zinc phosphate) and,
- A non hazardous additive for which there is no obligation to provide measures to control risks.

As this product is not classified towards the aquatic environment, risk control measures do not seem mandatory. In fact all Zinc phosphate identified uses may be derived for NOVINOX ACE 20. However, it is recommended to apply the risks management measures of zinc phosphate for NOVINOX ACE 20.

Numerous uses were identified for **zinc phosphate $Zn_3(PO_4)_2, 4H_2O$** . These are listed in table below. Recommended uses by the SNCZ for downstream channel are in the e-SDS

Identified uses for $Zn_3(PO_4)_2, 4H_2O$ and corresponding Generic Exposure Scenario (GES) of zinc phosphate:

IU: 10 Laboratory reagent; **GES code: 3**

IU: 14 Component for production of Coatings / paints, inks, enamels, varnishes; **GES code: 1**

IU: 15-16 Use of $Zn_3(PO_4)_2$ containing paints & coatings; **GES code: 7**, and Generic consumer/environment*

* corresponds to "GES 8" in IUCLID

16. FURTHER INFORMATION (continued)

GERMANY : - Wassergefährdungsklasse WGK (VwVwS) : WGK 1 –in accordance with annex 4

USA :

- **RTECS n°**: TD 0590000 (Register of Toxical Effects of Chemical Substances).
 - Substances listed in the Toxic Substances Control Act Inventory (TSCA) (USA).
 - **Cercla hazard rating (scale 0-3)** : Toxicity 2 - Flammability 0 -Reactivity 0 - Persistence 3
- HMIS Rating : H = 0 - F = 0 - PH = 0.

HMIS III : The HMIS III ratings are from the HMIS Third Edition. There have been significant changes made to the system. "PH" stands for "Physical Hazard" as defined in the OSHA Haz Com Standard and replaces the former code "R" for "Reactivity". For a more detailed explanation of the system and the ratings, please contact our Offices at: INT = 33 1 30405757.

International status of the substances in the NOVINOX ACE 20 :

- **Europ (EC)**: **REACH** Status: All substances included in this mixture are registered.
All the components are included in the EINECS.
This preparation is ROHS compliant (2002/95/EC) for Lead, Cadmium, Hexavalent Chromium, Mercury, Polybrominated diphenylethers and Polybrominated biphenyls.
End Life of Vehicles (ELV 2000/53/EC)
- **Australia** : All the components are listed in the AICS.
- **Canada** : All the components are Domestic Substance List (DSL) registered.
- **China**: All the components are SEPA listed.
- **Japan** : All the components are listed in the MITI.
- **USA**: All the components are TSCA registered.
- **Philippines**: All the components are PICSS registered.
- **South Korea**: ECL/MOE Yes.

End of safety data sheet

Modifications compare to the former version : : Addition : Text modification.

The information contained herein is based on the present state of our knowledge, but without liability.