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| | | Supersedes : 29 / 10 / 2009 |
| LIQUID PREPARATION FOR : TIPP-EX® RAPID CORRECTION FLUID | | BIC |

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

- 1.1. **Product identifier** : LIQUID PREPARATION FOR : TIPP-EX® RAPID CORRECTION FLUID
- 1.2. **Relevant identified uses of the substance or mixture and uses advised against** : Correction fluid
- 1.3. **Details of the supplier of the safety data sheet**
- SUPPLIER**
- Name** : SOCIETE BIC
- Address** : 14, Rue Jeanne d'Asnières
92611 CLICHY Cédex
FRANCE
- Telephone number** : + 33 01 45 19 52 00
- Telefax number** : +33 01 45 19 52 99
- E-mail** : Bic.Contact@bicworld.com
- 1.4. **Emergency telephone number** : ORFILA (France) : +33 1 45 42 59 59

2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

MOST IMPORTANT HAZARDS

- Adverse human health effects** : Vapours may cause drowsiness and dizziness.
Irritating to skin
- Environmental effects** : Toxic to aquatic organisms
May cause long-term adverse effects in the aquatic environment.
- Physical and chemical hazards**
- **Fire or explosion** : Highly flammable liquid
May form flammable/explosive vapour-air mixtures
- Classification of the product** : According to European regulations (67/548/EEC & 1999/45/EC), this product is classified as :
F; R11
Xi; R38
R67
N; R51/53

2.2. Label elements

EC LABELLING :

- Symbols and indications of danger



- HIGHLY FLAMMABLE (F)
- IRRITANT (Xi)
- DANGEROUS FOR THE ENVIRONMENT (N)

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| 2. HAZARDS IDENTIFICATION | (continued) |
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- R phrases : R11 : Highly flammable.
R38 : Irritating to skin.
R51/53 : Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R67 : Vapours may cause drowsiness and dizziness.
- S phrases : S2 : Keep out of the reach of children.
S16 : Keep away from sources of ignition - No smoking.
S24 : Avoid contact with skin.
S29 : Do not empty into drains.
S46 : If swallowed seek medical advice immediately and show this container or label.
S61 : Avoid release to the environment. Refer to special instructions/Safety data sheets.
- Further data : : Reduced labelling allowed for small packaging (< 125 ml)
- 2.3. Other hazards : None, to our knowledge

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| 3. COMPOSITION / INFORMATION ON INGREDIENTS |
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MIXTURE

Chemical nature : Mixture of solvents and titanium dioxide

Hazardous constituents

| Substance name | Contents | CAS No | EC No | Index No | Classification |
|--------------------------------------------|----------|------------|-----------|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Titanium dioxide | < 50 % | 13463-67-7 | 236-675-5 | ---- | ----- |
| Naphtha (petroleum), hydrotreated light | < 40 % | 64742-49-0 | 265-151-9 | 649-328-00-1 | ---- F; R11 Xn; R65 R67 Xi; R38 N; R51-53 ----- Flam. Liq. 2 H225 Asp. Tox 1 H304 Skin Irrit. 2 H315 STOT SE 3 H336 Aquatic Chronic 2 H411 |
| Naphtha (petroleum), light alkylate | < 10 % | 64741-66-8 | 265-068-8 | 649-276-00-X | ---- F; R11 Xn; R65 R67 Xi; R38 N; R51-53 ----- Flam. Liq. 2 H225 Asp. Tox 1 H304 Skin Irrit. 2 H315 STOT SE 3 H336 Aquatic Chronic 2 H411 |
| Solvent naphtha (petroleum), medium aliph. | < 1 % | 64742-88-7 | 265-191-7 | 649-405-00-X | ---- R10 Xn; R65 Xi; R38 N; R51-53 ----- Asp. Tox 1 H304 Flam. Liq. 3 H226 Skin Irrit. 2 H315 Aquatic Chronic 2 H411 |
| Solvent naphtha (petroleum), light arom. | < 1 % | 64742-95-6 | 265-199-0 | 649-356-00-4 | ---- R10 Xn; R65 R66 R67 Xi; R37 N; R51-53 ----- Asp. Tox 1 H304 Flam. Liq. 3 H226 STOT SE 3 H335 STOT SE 3 H336 |

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3. COMPOSITION / INFORMATION ON INGREDIENTS (continued)

STOT RE EUH066
Aquatic Chronic 2 H411

Further information : Full text of R and H phrases : see section 16

4. FIRST AID MEASURES

4.1. Description of first aid measures

- Inhalation** : Move the affected person away from the contaminated area and into the fresh air
If the person feels unwell :
Call a doctor
- Skin contact** : Wash immediately with plenty of soap and water
In case of redness or irritation, consult a doctor
- Eye contact** : Immediately rinse with water for a prolonged period while holding the eyes wide open
If irritation persists, consult an eye specialist
- Ingestion** : Never attempt to induce vomiting
Consult a doctor
- 4.2. Most important symptoms and effects, both acute and delayed** : In case of contact with skin : Redness, pain.
On inhalation : Drowsiness , Dizziness
- 4.3. Indication of any immediate medical attention and special treatment needed** : No information available

5. FIRE-FIGHTING MEASURES

- 5.1. Extinguishing media** : Foam
Powders
Carbon dioxide (CO2)
- 5.2. Special hazards arising from the substance or mixture** : The vapours are heavier than air and may travel along the ground. Distance ignition possible.
On heating or during combustion :
Toxic vapors may be released
- 5.3. Advice for fire-fighters** : Clear the danger area
Cool down the containers/equipment exposed to heat with a water spray
Contain the extinguishing fluids by bunding (the product is hazardous for the environment)
Do not attempt to fight the fire without suitable protective equipment :
Self-contained breathing apparatus
Standard protection

6. ACCIDENTAL RELEASE MEASURES

- 6.1. Personal precautions, protective equipment and emergency procedures** : For non-emergency personnel :
Avoid contact with skin and eyes
Do not breathe vapours
No flames, no sparks. Eliminate all sources of ignition.
Do not smoke

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| 6. ACCIDENTAL RELEASE MEASURES | (continued) |
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In case of important spillage :
 Mark out the contaminated area with signs and prevent access to unauthorized personnel
 For emergency responders :
 Protective equipment :
 - full protective clothing and equipment
 - respiratory protective device
 Stop the leak as quickly as possible (using non-sparking tools)
 Prevent the product from entering drains (risk of explosion)
 Ventilate spillage area

6.2 Environmental precautions : Contain the spilled material by bunding (product is hazardous for the environment)
 Do not discharge into drains and rivers

6.3. Methods and material for containment and cleaning up

- **Recovery** : Recover the product by mechanical means.

- **Neutralization** : Absorb non-recoverable liquid with:
 - inert absorbent material
 - earth or sand

- **Disposal** : Dispose of contaminated materials in accordance with current regulations

6.4 Reference to other sections : For further information see section 13

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| 7. HANDLING AND STORAGE |
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7.1. Precautions for safe handling

Technical measures : Vapour extraction at source
 Use non-sparking tools

Precautions : Avoid contact with skin and eyes
 Avoid the build-up of electrostatic charge
 Smoking is forbidden
 Do not overheat the product.

Hygiene measures : Do not drink, eat or smoke in the workplace
 Always wash your hands after handling the product

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : The floor of the depot must be impermeable, non-combustible and designed to form a basin, in order that stored flammable liquids should not, under any circumstances, be released outside

Storage conditions

- **Recommended** : Store :
 - in a cool and dry area
 - in a well-ventilated area
 - the container tightly closed
 - away from any source of ignition
 - away from heat
 - away from any flames

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| 7. HANDLING AND STORAGE | (continued) |
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Incompatible materials : Strong oxidizing agents
Oxidizing materials

Packaging materials

- **Recommended** : Original packaging

7.3. Specific end use(s) : No information available

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| 8. EXPOSURE CONTROLS / PERSONAL PROTECTION |
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8.1. Control parameters

Occupational exposure limits

- **France** : Titanium dioxide :
VME : 10 mg/m³ (Ti)
Hydrocarbons C6 - C12 :
VME : 1000 mg/m³
VLE : 1500 mg/m³

- **Germany** : : None.

8.2. Exposure controls

Engineering measures : Ensure good ventilation of the work station
Extraction to remove vapours at their source

Personal protective equipment

- **Respiratory protection** : If vapour is released:
Aerosol filter type A

- **Hand protection** : Impermeable protective gloves
The protective gloves to be used must comply with the specifications of EC directive 89/686/EEC and the resultant standard EN 374
Breakthrough time : refer to the recommendations of the supplier

- **Eye protection** : Safety goggles

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| 9. PHYSICAL AND CHEMICAL PROPERTIES |
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9.1. Information on basic physical and chemical properties

Physical state : Liquid

Colour : white

Odour : solvent.

Olfactory limit : Not determined

pH : Not applicable

Specific temperatures

- **Boiling** : 95-114 °C (760 mmHg)

- **Melting point** : Not determined

Decomposition temperature : Not determined

Flammability characteristics

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| 9. PHYSICAL AND CHEMICAL PROPERTIES | (continued) |
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- Flash point : -9.0 °C (NF EN ISO 13736)
- Auto-ignition temperature : Not determined
- Oxidizing properties** : Non oxidizing material according to EC criteria
- Explosive limits in air :**
- Lower : : 1.7 % (volume)
- Upper : : 12.3 % (volume)
- Vapour pressure** : 26-49 mmHg (20 °C)
- Vapour density (air = 1)** : Not determined
- Relative density (water = 1)** : 1.25 (25 °C)
- Solubility**
- in water : Practically insoluble. (0.1 g/l)
- Octanol/water partition coefficient** : Not determined
- Kinematic viscosity** : > 60 mm²/s (40 °C)
- Volatile component :** : 0.89 - 1.08 %
- 9.2 Further information** : No information available

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| 10. STABILITY AND REACTIVITY |
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- 10.1. Reactivity** : To our knowledge, the product does not present any particular risk
- 10.2. Chemical stability** : Stable at ambient temperature and under normal conditions of use
- 10.3. Possibility of hazardous reactions** : None, to our knowledge
- 10.4. Conditions to avoid** : Heat, sparks, open flames, ignition source
- 10.5. Incompatible materials** : - strong reducing agents
- strong oxidizing agents
- 10.6. Hazardous decomposition products** : On combustion or on thermal decomposition (pyrolysis) releases :
Carbon oxides (CO, CO₂)
Various hydrocarbon fragments

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| 11. TOXICOLOGICAL INFORMATION |
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- 11.1. Information on toxicological effects**
- Acute toxicity** : Vapours may cause drowsiness and dizziness
- Naphtha (petroleum), light alkylate :
LC 50 inhalation / 4h (rat) : > 5.04 ppm
LD 50 oral (rat) : > 7000 mg/kg
LD 50 skin (Rabbit) : > 2000 mg/kg
- Naphtha (petroleum), hydrotreated light :
LC 50 inhalation / 6h (rat) : > 12 mg/l
LD 50 oral (rat) : > 5000 mg/kg
LD 50 skin (Rabbit) : 3160 mg/kg
- Titanium dioxide :
LC 50 inhalation / 4h (rat) : > 3.56 mg/l

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| 11. TOXICOLOGICAL INFORMATION | (continued) |
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LD 50 oral (Rat) : > 10000 mg/kg
LD 50 skin (Rabbit) : > 10000 mg/kg
(published data)

Local effects : Irritating to the skin

Respiratory or skin sensitization : No sensitizing effect reported

Repeated dose toxicity : No additional information available

Specific effects

Carcinogenicity : Titanium dioxide (powder) is listed as being potentially carcinogenic (group 2B) by the CIRC, based on studies on animals
However, studies on human epidemiology do not suggest links between the occupational exposure to titanium dioxide and the risk of cancer

Mutagenicity : No additional information available

Reproductive toxicity : No additional information available

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| 12. ECOLOGICAL INFORMATION |
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12.1. Toxicity : Toxic to aquatic organisms
May cause long-term adverse effects in the aquatic environment.
Naphtha (petroleum), light alkylate :
LC 50 (Fish : Pimephales promelas) / 96 h : 8.3 mg/l
Naphtha (petroleum), hydrotreated light :
EC 50 (crustacean) / 96 h : 2.6 mg/l
(published data)

12.2. Persistence and degradability : Mixture based on substances which are not readily biodegradable

12.3. Bioaccumulative potential : No information available

12.4. Mobility in soil : No information available

12.5. Results of PBT and vPvB assessment : No information available

12.6. Other adverse effects : No information available

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| 13. DISPOSAL CONSIDERATIONS |
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13.1. Waste treatment methods

WASTE FROM PRODUCT

Prohibition : Discharging waste into rivers and drains is prohibited

Destruction/Disposal : Dispose of in accordance with relevant local regulations

CONTAMINATED PACKAGING

Destruction/disposal : Destroy at an authorised site

NOTE : The user's attention is drawn to the possible existence of specific European, national or local regulations regarding disposal

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| 14. TRANSPORT INFORMATION |
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- 14.1. UN number : 1139
 - 14.2. UN proper shipping name : COATING SOLUTION
 - 14.3. Transport hazard class(es) : 3
 - 14.4. Packing group : II
 - 14.5. Environmental hazards : Additional marking : "Environmentally hazardous substance"
 - 14.6. Special precautions for user : No information available
 - 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code : No information available
- NOTE** : The above regulatory prescriptions are those valid on the date of publication of this sheet.
Given the possible evolution of transport regulations for hazardous materials, in case the date of issue is older than 12 months, compared to the current one, it would be advisable to check their validity with your commercial agency
Packages from older stocks can especially have the UN number 1993 (due to the older classification)

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| 15. REGULATORY INFORMATION |
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- 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture : France : Occupational diseases (table(s) n° 84)
Germany : Water hazard class (WGK) : 2
- 15.2. Chemical Safety Assessment : No information available

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| 16. OTHER INFORMATION |
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- R phrases text of § 2&3** : R10 : Flammable.
R11 : Highly flammable.
R37 : Irritating to respiratory system.
R38 : Irritating to skin.
R51/53 : Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R65 : Harmful : may cause lung damage if swallowed.
R66 : Repeated exposure may cause skin dryness or cracking.
R67 : Vapours may cause drowsiness and dizziness.
- H phrases text of § 2&3** : EUH066 : Repeated exposure may cause skin dryness or cracking.
H225 : Highly flammable liquid and vapour.
H226 : Flammable liquid and vapour.
H304 : May be fatal if swallowed and enters airways.
H315 : Causes skin irritation.
H335 : May cause respiratory irritation.
H336 : May cause drowsiness or dizziness.
H411 : Toxic to aquatic life with long lasting effects.
- Restrictions on use** : This product must not be used for other applications that mentioned in §1.

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| 16. OTHER INFORMATION | (continued) |
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Bibliography references : Joint Research Centre (JRC)
 INRS (Institut National de Recherche et de Sécurité)
 IUCLID (International Uniform Chemical Information Data Base)
 RTECS (Registry of Toxic effects of Chemical Substances)
 MSDS of suppliers

*** Update :** : This sheet was updated (refer to the date at the top of this page)
 This sheet has been revised completely (changes were not marked)

Safety data sheet established by : LISAM SERVICES - TELEGIS
 6 rue des Boucheries F-60400 NOYON
 www.reachelp.com
 Safety Made Easy with www.lisam.com

This sheet complements the technical sheets but does not replace them. The information given is based on our knowledge of the product, at the time of publication. It is given in good faith.

Besides, the attention of the user is drawn to the possible risk incurred by using the product for any other use than that for which it was intended.

In no way does this exempt the user from knowing and applying all the regulations controlling his activity. He alone will take on the responsibility for taking the precautions involved by the use of the product.

The aim of all the mandatory regulations mentioned is just to help the user to fulfil his obligations regarding the use of hazardous products.

This information must not be considered exhaustive. It does not exempt the user from ensuring that other obligations than those mentioned could apply, related to the storage and use of the product, this being his sole responsibility.

End of document