## **Safety Data Sheet:**

According to EC Regulation 1907/2006/EC - revision 2015/830

Revision No. 3.1

Print Date 02/13/2018 Creation Date 02/02/2015 Revision date 30/05/2017

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

#### 1.1. Product identifier

Product Name ZOFF AEROSOL Product Code EP\_0424KG V2 (CLP)

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

Recommended use

Graffiti remover and cleaner.

#### 1.3. Details of the supplier of the safety data sheet

NCH European Technical CentreCodnor Gate Business ParkRipley, Derbyshire, DE5 3NW, UKTel.:01902 510401.

E-mail address reach@nch.com Website address www.ncheurope.com

#### 1.4. Emergency telephone number

01902 510401 (available during Office Hours)

## SECTION 2. HAZARDS IDENTIFICATION

## 2.1. Classification of the substance or mixture

## Classification according to Regulation (EC) No 1272/2008 (CLP/GHS) and its adaptations

Aerosols: Category 1 Skin irritation: Category 2 Eye irritation: Category 2

H222 - Extremely flammable aerosol

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H229 - Pressurized container: May burst if heated

## 2.2. Label elements

## Labelling according to Regulation (EC) No 1272/2008 (CLP/GHS) Hazard pictograms





## Signal Word Danger Hazard Statements

H222 - Extremely flammable aerosol

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H229 - Pressurized container: May burst if heated

#### **Precautionary Statements**

P337 + P313 - If eye irritation persists: Get medical advice/attention

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

P211 - Do not spray on an open flame or other ignition source

P251 - Do not pierce or burn, even after use

P410 + P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C.

P260 - Do not breathe mist/spray.

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Keep out of reach of children.

For industrial and institutional use only.

## 2.3. Other hazards

No additional hazards identified.

The components in this formulation do not meet the criteria for classification as PBT or vPvB. As defined under the regulation EC 1907/2006.

## SECTION 3. COMPOSITION / INFORMATION OF INGREDIENTS

#### 3.2. Mixture

| Chemical Name               | CAS No.     | EC No.     | EU - REACH  | Weight %  | EU - Not            | tes |
|-----------------------------|-------------|------------|-------------|-----------|---------------------|-----|
|                             |             |            | Reg Number  |           | GHS/CLP             |     |
| XYLENE                      | 1330-20-7   | 215-535-7  | 01-21195394 | 25 - < 50 | Acute Tox. 4        |     |
|                             |             |            | 52-40       |           | (H312)              |     |
|                             |             |            |             |           | Skin Irrit. 2       |     |
|                             |             |            |             |           | (H315)              |     |
|                             |             |            |             |           | Flam. Liq. 3        |     |
|                             |             |            |             |           | (H226)              |     |
|                             |             |            |             |           | Acute Tox. 4        |     |
|                             |             |            |             |           | (H332)              |     |
|                             |             |            |             |           | Asp. Tox. 1         |     |
|                             |             |            |             |           | (H304)              |     |
|                             |             |            |             |           | Eye Irrit. 2        |     |
|                             |             |            |             |           | (H319)              |     |
|                             |             |            |             |           | STOT SE 3           |     |
|                             |             |            |             |           | (H335)              |     |
|                             |             |            |             |           | STOT RE 2           |     |
|                             |             |            |             |           | (H373)              |     |
|                             |             |            |             |           | Aquatic             |     |
|                             |             |            |             |           | Chronic 3           |     |
|                             |             |            |             |           | (H412)              |     |
| DIMETHYL ETHER              | 115-10-6    | 204-065-8  | 01-21194721 | 25 - < 50 | Flam. Gas 1         |     |
|                             |             |            | 28-37       |           | (H220)              |     |
| ETINA DENZENE               | 100 11 1    | 000 040 4  | 04.04405004 | 4 0       | Press. Gas          |     |
| ETHYLBENZENE                | 100-41-4    | 202-849-4  | 01-21195394 | 1 - < 3   | riodio i oxi. i ji  |     |
|                             |             |            | 52-40       |           | (H332)              |     |
|                             |             |            |             |           | Asp. Tox. 1         |     |
|                             |             |            |             |           | (H304)              |     |
|                             |             |            |             |           | Flam. Liq. 2        |     |
|                             |             |            |             |           | (H225)<br>STOT RE 2 |     |
|                             |             |            |             |           |                     |     |
| SODIUM PETROLEUM SULPHONATE | 68608-26-4  | 271-781-5  | 01-21195278 | 4 . 2     | (H373)              |     |
| SODIUM PETROLEUM SULPHONATE | 08008-26-4  | 2/1-/81-5  |             | 1 - < 3   | Eye Irrit. 2        |     |
| ALCOHOLO, CO 44 ETHOVALATED | 00.400.40.0 | 04.4.400.0 | 59-22       | 4         | (H319)              |     |
| ALCOHOLS C9-11 ETHOXYLATED  | 68439-46-3  | 614-482-0  | -           | 1 - < 3   | Acute Tox. 4        |     |
| (12EO)                      |             |            |             |           | (H302)              |     |
|                             |             |            |             |           | Eye Dam. 1          |     |
|                             |             |            |             |           | (H318)              |     |

For any H statements mentioned in this section, see the full text in section 16.

#### **EU Notes**

Note P - The classification as a carcinogen or mutagen does not apply as the substance contains less than 0.1% w/w benzene

## **SECTION 4. FIRST AID MEASURES**

#### 4.1. Description of first aid measures

General advice

Avoid breathing vapors or mists. Get medical attention immediately if symptoms occur.

Eye Contact

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician immediately. Skin Contact

Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Get medical attention if irritation develops and persists.

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Ingestion

Rinse mouth with water. If swallowed, do not induce vomiting - seek medical advice.

Inhalation

If symptoms persist, call a physician. If exposed to high concentrations of the aerosol vapours, move to fresh air.

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

Sensitization

No information available.

Eye contact

May cause irritation as itching and redness.

Skin contact

Prolonged contact will dry and defat the skin and may cause irritation such as itching and redness.

Inhalation

Inhalation of mists may result in irritation to the respiratory tract. May cause headaches, dizziness, drowsiness and nausea.

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

Notes to physician

Treat symptomatically.

## SECTION 5. FIRE-FIGHTING MEASURES

## 5.1. Extinguishing media

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use:. Dry powder. Alcohol-resistant foam. Water spray. Carbon dioxide (CO2).

Extinguishing media which must not be used for safety reasons

Water jet.

#### 5.2. Special hazards arising from the substance or mixture

When exposed to high temperatures, the preparation may release dangerous decomposition products such as carbon monoxide and dioxide. smoke and/or nitrogen oxide.

Pressurized container. Extremely flammable. Keep product and empty container away from heat and sources of ignition.

## 5.3. Advice for firefighters

Firefighters should wear a self-contained breathing apparatus and full protective gear. Cool fire-exposed containers with water spray to prevent bursting.

## **SECTION 6. ACCIDENTAL RELEASE MEASURES**

## 6.1. Personal precautions, protective equipment and emergency procedures

Avoid contact with skin, eyes, and clothing. Prevent further leakage or spillage if safe to do so. See section 8. Remove all sources of ignition. Ventilate the area. Evacuate personnel to safe areas. Due to the nature of the aerosol packaging, a large spill is unlikely. For a small spill, wear appropriate protective clothing, ventilate the area, absorb with an inert material and transfer all material into a properly labeled container for disposal. Use care as spills may be slippery.

#### 6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so. Insoluble in water and hence will float on the surface.

## 6.3. Methods and material for containment and cleaning up

Methods for Containment

Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13). Remove all sources of ignition. *Methods for Cleaning up* 

For the non volatile residues:. Clean preferably with a detergent, do not use solvents.

#### 6.4. Reference to other sections

Refer to sections 7, 8 and 13.

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## SECTION 7. HANDLING AND STORAGE

## 7.1. Precautions for safe handling

Avoid breathing vapors or mists. Do not eat, drink or smoke when using this product. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. Ensure adequate ventilation.

#### 7.2. Conditions for safe storage, including any incompatibilities

Keep away from heat and sources of ignition. P401 - Store in accordance with local regulations. For safety reasons in case of fire, cans should be stored separately in closed containments. Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50°C.

## 7.3. Specific end use(s)

No information available.

#### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### 8.1. Control parameters

## Exposure limits

If vapours, fumes or mists are generated, their concentration in the workplace area should be kept to the lowest reasonable level. For substances.

| Chemical Name  | European Union | Czech                        | Slovakia                      | Poland                       | Hungary                          |
|----------------|----------------|------------------------------|-------------------------------|------------------------------|----------------------------------|
| XYLENE         |                | PEL: 200mg/m <sup>3</sup>    | hranicny 442mg/m <sup>3</sup> | NDS: 100 mg/m <sup>3</sup>   | ÇK-érték: 442 mg/m <sup>3</sup>  |
|                |                | NPK-P: 400mg/m <sup>3</sup>  | 50ppm NPEL                    |                              | ÅK-érték: 221 mg/m <sup>3</sup>  |
|                |                |                              | 221mg/m <sup>3</sup> NPEL     |                              |                                  |
| DIMETHYL ETHER |                | PEL: 1000mg/m <sup>3</sup>   | 1000ppm NPEL                  | NDS: 1000 mg/m <sup>3</sup>  | CK-érték: 7680 mg/m <sup>3</sup> |
|                |                | NPK-P: 2000mg/m <sup>3</sup> | 1920mg/m <sup>3</sup> NPEL    |                              | ÁK-érték: 1920 mg/m <sup>3</sup> |
| ETHYLBENZENE   |                | PEL: 200mg/m <sup>3</sup>    | hranicny 884mg/m <sup>3</sup> | NDSCh: 400 mg/m <sup>3</sup> | CK-érték: 884 mg/m <sup>3</sup>  |
|                |                | NPK-P: 500mg/m <sup>3</sup>  | 100ppm NPEL                   | NDS: 200 mg/m <sup>3</sup>   | ÁK-érték: 442 mg/m <sup>3</sup>  |
|                |                |                              | 442mg/m <sup>3</sup> NPEL     | _                            |                                  |

Slovakia: Where applicable, the maximum limit under Regulation 355/2006 and Regulation 300/2007 as amended

## 8.2. Exposure controls

Engineering Measures

Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment

Use personal protection equipment as per Directive 89/686/EEC.

Respiratory Protection

In case of inadequate ventilation wear respiratory protection. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Conforming to EN 14387 (organic vapours).

Hand Protection

Wear suitable protective gloves conforming to EN 374. Type of gloves suggested: Solvent-resistant gloves (butyl-rubber). Fluorinated rubber. Polyvinyl alcohol. Suitability and durability of a glove is dependent upon usage factors such as frequency, duration of use, temperature and chemical resistance. The use of a chemical-protective glove may in practice be much shorter than the permeation time determined through testing. For break through times, refer to glove manufacturers recommendations. Eye Protection

Safety glasses if the method of use presents the likelihood of eye contact. Approved to EN 166.

General Hygiene Considerations

Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

#### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

## 9.1. Information on basic physical and chemical properties

Information below relates to typical values and does not constitute a specification.

Appearance White Foam Specific Gravity 0.84

Physical stateLiquidSolubilitySoluble in waterOdorSolventAutoignition TemperatureNo information available.

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**VOC Content (%)** 

68.2 %

pH 9 Viscosity Non viscous

Melting Point/RangeNo information available.Explosive propertiesNo information availableBoiling Point/RangeNo information available.Oxidizing PropertiesNo information available

Flash Point < 0 °C

Evaporation Rate
Flammability Limits in Air %:
Vapor Pressure
Vapor Density

No information available
No information available
No information available

#### 9.2. Other information

No other information available

## **SECTION 10. STABILITY AND REACTIVITY**

## 10.1. Reactivity

Not considered as highly reactive. See further information below.

#### 10.2. Chemical stability

Stable under normal conditions.

## 10.3. Possibility of hazardous reactions

The mixture itself will not dangerously react or polymerise to create hazardous conditions in normal use.

#### 10.4. Conditions to avoid

Heat, flames, and sparks. Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50°C. Keep away from open flames, hot surfaces, and sources of ignition.

## 10.5. Incompatible materials

Strong oxidizing agents.

## 10.6. Hazardous decomposition products

None under normal storage conditions and use.

When exposed to high temperatures, the preparation may release dangerous decomposition products such as carbon monoxide and dioxide, smoke and/or nitrogen oxide.

## SECTION 11. TOXICOLOGICAL INFORMATION

## 11.1. Information on toxicological effects

## Product Information

The product itself has not been tested.

| Chemical Name                        | Oral LD50            | Dermal LD50           | Inhalation LC50         |
|--------------------------------------|----------------------|-----------------------|-------------------------|
| XYLENE                               | = 3500 mg/kg (Rat)   | < 2000 mg/kg (Rabbit) | = 29.08 mg/L (Rat) 4 h  |
| DIMETHYL ETHER                       |                      |                       | = 308.5 mg/L (Rat) 4 h  |
| ETHYLBENZENE                         | = 4820 mg/kg (Rat)   | > 2000 mg/kg (Rabbit) | = 17.2 mg/L ( Rat ) 4 h |
| ALCOHOLS C9-11<br>ETHOXYLATED (12EO) | = 1378 mg/kg ( Rat ) | > 2 g/kg (Rabbit)     |                         |

#### Sensitization

No information available.

#### Skin contact

Prolonged contact will dry and defat the skin and may cause irritation such as itching and redness.

#### Inhalation

Inhalation of mists may result in irritation to the respiratory tract. May cause headaches, dizziness, drowsiness and nausea.

#### Eye contact

May cause irritation as itching and redness.

## **Carcinogenicity**

There are no known carcinogenic substances in this product.

## Mutagenic Effects

There are no known mutagenic substances in this product.

#### Reproductive Effects

There are no known substances in this product with effects on reproduction.

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## SECTION 12. ECOLOGICAL INFORMATION

## 12.1. Toxicity

Product Information

The product itself has not been tested.

## **Ecotoxicity effects**

Contains substance(s) known to be hazardous to the aquatic environment.

| Chemical Name | Toxicity to Fish  | Crustacea  | Toxicity to Algae  |
|---------------|---|--|--|
| XYLENE        | LC50 30.26-40.75 mg/L Poecilia<br>reticulata 96 h<br>LC50 = 13.4 mg/L Pimephales<br>promelas 96 h<br>LC50 = 19 mg/L Lepomis<br>macrochirus 96 h<br>LC50 = 780 mg/L Cyprinus carpio<br>96 h  | 3.82: 48 h water flea mg/L EC50<br>0.6: 48 h Gammarus lacustris mg/L<br>LC50 | EC50 = 11 mg/L<br>Pseudokirchneriella subcapitata 72<br>h  |
| ETHYLBENZENE  | LC50 11.0-18.0 mg/L Oncorhynchus mykiss 96 h LC50 7.55-11 mg/L Pimephales promelas 96 h LC50 9.1-15.6 mg/L Pimephales promelas 96 h LC50 = 32 mg/L Lepomis macrochirus 96 h LC50 = 4.2 mg/L Oncorhynchus mykiss 96 h LC50 = 9.6 mg/L Poecilia reticulata 96 h | 1.8 - 2.4: 48 h Daphnia magna mg/L<br>EC50                                   | EC50 = 11 mg/L Pseudokirchneriella subcapitata 72 h EC50 = 4.6 mg/L Pseudokirchneriella subcapitata 72 h EC50 > 438 mg/L Pseudokirchneriella subcapitata 96 h EC50 2.6 - 11.3 mg/L Pseudokirchneriella subcapitata 72 h EC50 1.7 - 7.6 mg/L Pseudokirchneriella subcapitata 96 h |

## 12.2. Persistence and degradability

Ecotoxicological properties are substance specific, i.e. bioaccumulation, persistence and degradability. The information is given, where available and appropriate, for substance(s) of the mixture.

## 12.3. Bioaccumulative potential

Bioaccumulation unlikely due to the high volatility of the product. Component information below.

| Chemical Name  | Partition coefficient |
|----------------|-----------------------|
| XYLENE         | 3.15                  |
| DIMETHYL ETHER | -0.18                 |
| ETHYLBENZENE   | 3.118                 |

## 12.4. Mobility in soil

The product is insoluble and floats on water. This product is volatile and will readily evaporate to the air if released into the environment.

## 12.5. Results of PBT and vPvB assessment

The components in this formulation do not meet the criteria for classification as PBT or vPvB. As defined under the regulation EC 1907/2006.

## 12.6. Other adverse effects

No data available.

## SECTION 13. DISPOSAL CONSIDERATIONS

## 13.1. Waste treatment methods

Slovakia: Dispose of product and packaging in accordance with the law č. 79/2015 Z. of waste and amending certain laws Waste from Residues / Unused Products

Dispose of in accordance with local regulations.

## Contaminated Packaging

Empty remaining contents. Empty containers should be taken for local recycling, recovery or waste disposal. Recycle according to official regulations. For empty containers - Do not weld, solder, braze, grind etc.. Do not expose to heat, flames, sparks or other

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sources of ignition. Do not pierce or burn, even after use.

EWC waste disposal No

The following EWC/ AVV waste codes may be applicable:. 16 05 04\* gases in pressure containers (including halons) containing dangerous substances.

Other Information

According to the European Waste Catalogue, Waste Codes are not product specific, but application specific.

## SECTION 14. TRANSPORT INFORMATION

## 14.1, 14.2, 14.3, 14.4.

IMDG/IMO

**UN-No** UN1950

Proper Shipping Name Aerosols, Flammable

Hazard Class 2.1 EmS No. F-D, S-U

ADR / RID

UN-No UN1950
Hazard Class 2.1
Classification Code 5F
Limited Quantity 1 L
Transport Cat. (Tunnel 2 (D)

**Restriction Code**)

IATA/ICAO

 UN-No
 UN1950

 Hazard Class
 2.1

 ERG-Code
 10P

#### 14.5. Environmental hazards

The mixture is not environmentally hazardous for transport.

#### 14.6. Special precautions for user

No special precautions.

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

Packaged product, not typically transported in IBC's.

#### **Additional information**

The above information is based on latest transport regulations i.e. ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport.

## **SECTION 15. REGULATORY INFORMATION**

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

This mixture was classified in compliance with EC Regulation 1272/2008 (CLP) and its adaptations.

#### WGK Classification

Water-endangering (WGK 2), Classification according AwSV-Verordnung

## 15.2. Chemical safety assessment

No chemical safety assessment has been carried out for this mixture by the supplier

## SECTION 16. OTHER INFORMATION

## Text of H statements mentioned in Section 3

H220 - Extremely flammable gas. H225 - Highly flammable liquid and vapor. H226 - Flammable liquid and vapor. H302 - Harmful if swallowed. H304 - May be fatal if swallowed and enters airways. H312 - Harmful in contact with skin. H315 - Causes skin irritation. H318 - Causes serious eye damage. H319 - Causes serious eye irritation. H332 - Harmful if inhaled.

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

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On the basis of test data. H222 - Extremely flammable aerosol. H226 - Flammable liquid and vapor. Calculation method. H315 -

Causes skin irritation. H319 - Causes serious eye irritation.

Prepared By Austen Pimm Creation Date 02/02/2015 Revision date 30/05/2017

**Revision summary** 

CLP update. SDS sections updated 2 15 3 16

#### **Abbreviations**

REACH: Registration Evaluation Authorisation Restriction of Chemicals

EU: European Union EC: European community

EEC: European Economic Community

**UN: United Nations** 

CAS: Chemical Abstracts Service
PBT: Persistent Bioaccumulative Toxic
vPvB: very Persistent very Bioaccumulative
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent

EC50: Effective concentration, 50 percent

LogPow: LogP octanol/water

VwVwS: Verwaltungsvorschrift wassergefährdende Stoffe (Administrative order relating to substances hazardous to water - Germany)

WGK: Wassergefahrdungsklasse (Water Hazard Class - Germany).

AVV: Abfallverzeichnis-Verordnung (Waste Code - Germany)

ADR: Accord européen relatif au transport international des marchandises Dangereuses par Route (European agreement governing the

international carriage of dangerous goods by road) IMDG: International Maritime Dangerous Goods IATA: International Air Transport Association

ICAO: International Civil Aviation Organisation

RID: Reglement international concernant le transport des merchandises dangereuses par chemin der fer (Regulations concerning the International carriage of Dangerous goods by rail)

EmS: Emergency Response Procedures for Ships Carrying Dangerous Goods

ERG: Emergency Response Guidebook

IUCLID / RTECS International Uniform Chemical Information Database / Registry of Toxic Effects of Chemical Substances

GHS: Globally Harmonised System of classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

VOC: Volatile Organic Chemical w/w: weight for weight DMSO: Dimethyl sulphoxide

OECD: Organization for Economic Cooperation and Development

STEL: Short Term Exposure Limit TWA: Time Weighted Average

## **Further Information**

Component test results displayed in sections 11 and 12 are typically supplied by Chemadvisor and assembled from publicly available literature sources e.g. IUCLID / RTECS.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

#### **Disclaimer**

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

**End of Safety Data Sheet**