SAFETY DATA SHEET ES +

Version number: 4

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

1.1. Product identifier

Trade name ES

ES +

Article No.

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

Product type

Graffiti remover.

1.3. Details of the supplier of the safety data sheet

Supplier

Takcare

Street address

Vipvägen 7

746 33 Bålsta

Sweden

Telephone

+46 (0) 70-788 03 20

Email

info@takcare

Web site

www.takcare.se

Manufacturer

Trion Tensid AB

Street address

Svederusgatan 1-3

SE-754 50 Uppsala

Telephone

+46 18 15 61 90

Fax

+46 18 69 66 27

Email

info@trion.se

1.4. Emergency telephone number

Available outside office hours

Yes

Emergency phone number

911 / 112

Other

Trion Tensid AB

Contact person: William Stomilovic Email: william.stomilovic@trion.se

Takcare

Contact person: Christer Grenbäck Telephone: +46 (0) 70-788 03 20

SECTION 2:Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008, Annex VI

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Classification

Skin irritation, hazard category 2
Eye irritation, hazard category 2
Acute toxicity, oral, hazard category 4

Hazard statements

H302, H315, H319

2.2. Label elements

GHS labeling of the substance (in accordance with Regulation (EC) No 1272/2008, Annex VI)

Pictogram



Signal word

Warning

Hazard statements

H302 Harmful if swallowed. H315 Causes skin irritation.

H319 Causes serious eye irritation.

Precaution statements

P270 Do no eat, drink or smoke when using this product.

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

P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician/ / if you feel unwell.

P302 + P352 IF ON SKIN: Wash with plenty of and water.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.

P330 Rinse mouth.

P332 + P313 If skin irritation occurs: Get medical advice/attention.

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

P362 Take off contaminated clothing and wash before reuse.

2.3. Other hazards

Not applicable

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical name	CAS No. EC No. REACH No.	Concentration	Classification	H-phrase
Dimethyl glutarate	1119-40-0 214-277-2 01-2119900156-49-	30 - 50%	-	-
Dimethyl adipate	627-93-0 211-020-6 01-2119911093-50-	10 - 20%	-	-
Dimethyl succinate	106-65-0 203-419-9 01-2119486681-29-	10 - 20%	Eye Irrit. 2	H319
n-Butylpyrrolidone	3470-98-2 222-437-8 -	10 - 20%	Skin Irrit. 2, Eye Irrit. 2, Acute Tox. 4 - oral	H302, H315, H319

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Y-Butyrolactone	96-48-0 202-509-5 01-2119471839-21-	10 - 20%	Eye Irrit. 2, Acute Tox. 4 - oral	H302, H319
Phosphoric acid	7664-38-2 231-633-2 01-2119485924-24-	<3%	Skin Corr. 1B	H314

Substance additional information

For the full text of the H phrases mentioned in this Section, see Section 16.

SECTION 4:First aid measures

4.1. Description of first aid measures

Inhalation	Fresh air and rest.
Skin contact	Wash the skin with soap and water. Remove contaminated clothing immediately and continue washing.
Eye contact	Rinse carefully with lukewarm water for several minutes. Remove any contact lenses. Keep eyelids wide apart. Continue to rinse. Consult a physician.
Ingestion	If the injured person is fully conscious, give him/her a couple of glasses of milk or water immediately. Do not induce vomiting. Consult a physician.

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

Inhalation	Inhalation of high concentrations can result in: Pain, cough, Headache, nausea, vomiting, Vertigo and tiredness.
Skin contact	Repeated or prolonged skin contact can result in: irritation.
Eye contact	Risk of serious damage to eyes.
Ingestion	Ingestion of large amounts can result in: nausea, vomiting, diarrhoea and breathing difficulties.

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

Ensure that eyewash station are close to the workplace.

SECTION 5:Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media carbon dioxide (CO2), dry powder or Diffuse jet of water. Fire extinguishing methods: Cool with a diffuse jet of water. Cover with dry sand.

5.2. Special hazards arising from the substance or mixture

Not flammable, but can sustain combustion. The product can ignite when heated to temperatures at or in excess of the flash point.

5.3. Advice for firefighters

Special protective equipment
for fire-fighters

In the event of fire, wear self contained breathing apparatus. Wear suitable protective clothing.

Other

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Containers in the vicinity of fire should be moved immediately or cooled with water.

SECTION 6:Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use protective equipment as specified in section 8 of SDS. Do not get in eyes.

6.2. Environmental precautions

Prevent large discharges to drains. Collect in a suitable container that is approved for this purpose. Bank up and collect. In the event of major discharges into water, contact the waterworks or sewage works.

6.3. Methods and material for containment and cleaning up

Absorb in inert material (vermiculite, dry sand or soil) and collect. Rinse clean with plenty of water. Consider the risk of slipping. Only large-scale discharges can constitute a risk.

6.4. Reference to other sections

For personal protective equipment, see under section 8, and for waste see under section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Preventive handling	
precautions	

Do not get in eyes. Wash hands thoroughly after handling. Keep away from sources of ignition - No smoking.

General hygiene

Wash hands before eating, drinking, or smoking. Ensure good industrial hygiene.

7.2. Conditions for safe storage, including any incompatibilities

The product can attack certain plastics, rubber, painted and varnished surfaces. The package must be stored sealed and in a cool location. Store in the original container to avoid contamination. Keep away from food, drink and animal feeding stuffs.

7.3. Specific end use(s)

This product should only be used for those uses described in section 1.2

SECTION 8:Exposure controls/personal protection

8.1. Control parameters

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National occupational exposure limits	Ingredient	CAS no.	EC No.	Expos e limit mg/m ppm	t	Short-to xposure t mg/m3-	e limi	Remark	Source	Year
	Phosphoric a cid	7664-3 8-2	231-6 33-2	1	-	2	-	-	EH40/2005 Work place exposure li mits	-

8.2. Exposure controls

Technical precaution measures	Ensure that eyewash station are close to the workplace.
Eye / face protection	Safety glasses with side-shields conforming to EN166.
Safety gloves	Wear protective gloves. When handling chemicals, only CE marked chemical-resistant gloves may be used. The gloves must conform to the standard EN 374.
Other skin protection	Remove and wash contaminated clothing before re-use.
Respiratory protection	Wear breathing protection with a type A filter (brown) in the event of insufficient ventilation.

SECTION 9:Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance, colour	Yellowish
Appearance, physical state	Not applicable
Auto-ignition temperature	Not applicable
Decomposition temperature	Not applicable
Density	1090 kg/m3
Evaporation rate	Not applicable
Explosive properties	Not applicable
Flammability (solid, gas)	Not applicable
Flash point	> 90 ° C
Form	viscous liquid
Initial boiling point and boiling range	Not applicable
Melting point / freezing point	Not applicable
Odour	weak odour of solvents
Odour treshold	Not applicable
Oxidising properties	Not applicable
Partition coefficient: n-octanol / water	Not applicable

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pH in solution ~5

> pH value Not applicable

Relative density Not applicable

> Can be mixed with: Organic solvents Solubility

Solubility in water ~50 %

Upper / lower flammability or Not applicable

explosive limits

Vapour density Not applicable

Not applicable Vapour pressure

> 10800 cp **Viscosity**

9.2. Other information

Not applicable

SECTION 10:Stability and reactivity

10.1. Reactivity

Not applicable

10.2. Chemical stability

The product is partially soluble in water. Stable under normal usage and storage conditions. . **Chemical stability**

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Reacts with strong bases.

Incomplete combustion/thermal degradation generates: smoke, carbon dioxide (CO2) and harmful gases, e.g. carbon monoxide.

10.4. Conditions to avoid

Conditions to avoid

Store separately from sources of ignition.

10.5. Incompatible materials

Not applicable

10.6. Hazardous decomposition products

Not applicable

SECTION 11:Toxicological information

11.1. Information on toxicological effects

Information on toxicological effects

The product has a low toxicity, which means that the risk of injury during normal handling is small.

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acute toxicity	Inhalation of large amounts can result in: Pain, cough, Headache, nausea, vomiting, Vertigo and tiredness. Ingestion may cause: nausea, vomiting, diarrhoea and breathing difficulties.
skin corrosion/irritation	Not applicable
serious eye damage/irritation	Not applicable
Irritation	Repeated or prolonged skin contact can result in: irritation. Risk of serious damage to eyes.
respiratory or skin sensitisation	Not applicable
germ cell mutagenicity	Not applicable
carcinogenicity	Not applicable
reproductive toxicity	Not applicable
STOT-single exposure	Not applicable
STOT-repeated exposure	Not applicable
aspiration hazard	Not applicable
LD50 Oral	Dimethyl adipate (rat): 8191 mg/kg. Dimethyl glutarate (rat): 8191 mg/kg. Dimethyl succinate (rat): > 5000 mg/kg. Y-Butyrolactone (rat): 800 mg/kg. Phosphoric acid (rat): 1530 mg/kg.
LD50 Dermal	Dimethyl succinate (rabbit): > 5000 mg/kg. Dimethyl glutarate (rabbit): > 2250 mg/kg. Dimethyl adipate (rabbit): > 2250 mg/kg. Phosphoric acid (rabbit): 2740 mg/kg.
LC50 Inhalation	Dimethyl glutarate (rat): (4h) > 5,6 mg/l. Y-Butyrolactone (rat): > 2,68 mg/l (4 h).

SECTION 12:Ecological information

12.1. Toxicity

Aquatic	The product has a low level of toxicity to aquatic organisms.		
Acute fish toxicity	Dimethyl succinate (LC50): (96 h) 10-100 mg/l. Dimethyl glutarate (LC50): (96 h) 33,6 mg/l. Dimethyl adipate (LC50): (96 h) 30,9 mg/l. Y-Butyrolactone (LC50): (96 h) 220-460 mg/l. Phosphoric acid (LC50): (96 h) 138 mg/l.		
Acute algae toxicity	Dimethyl glutarate (IC50): (72 h) 18,2 mg/l. Y-Butyrolactone (IC50): (72 h) 79 mg/l.		
Acute crustacean toxicity	Dimethyl succinate (EC50): (48 h) 10-100 mg/l. Dimethyl glutarate (EC50): (48 h) 122,1 mg/l. Dimethyl adipate (EC50): (48 h) 112-150 mg/l. Y-Butyrolactone (EC50): (48 h) > 500 mg/l.		

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12.2. Persistence and degradability

Persistence and degradability

Biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential

Bio-accumulation is unlikely.

12.4. Mobility in soil

Not applicable

12.5. Results of PBT and vPvB assessment

Not applicable

12.6. Other adverse effects

Not applicable

Other

This assessment is based on the properties of the individual components.

SECTION 13:Disposal considerations

13.1. Waste treatment methods

Disposal considerations

After dilution with water, small quantities are permitted to go to water treatment plants. Residue and used product that cannot be reused must be handled as hazardous waste. The company is affiliated to REPA.

Packaging

Do not attempt to refill or clean the package. Empty packages must be handled in an environmentally correct manner according to applicable laws and provisions.

Other

Waste management

The Waste Regulations 2011 No. 988 H4 Irritant: substances and preparations that are not corrosive, but that can cause inflammation in the event of direct, prolonged or repeated contact with the skin or mucous membranes.

Waste code (EWC)

20 01 13* solvent.

Additional waste information

The waste code (EWC) is a recommendation. In the event of non-compliant handling, the end user is personally responsible for a suitable EWC code.

SECTION 14:Transport information

14.1. UN number

Not applicable

14.2. UN proper shipping name

Not applicable

14.3. Transport hazard class(es)

Not applicable

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14.4. Packing group

Not applicable

14.5. Environmental hazards

Not applicable

14.6. Special precautions for user

Not applicable

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

Not applicable

SECTION 15:Regulatory information

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

EU regulations Regulation (EC) No 1907/2006 of the European Parliament and of the Council, REACH. European Parliament and Council Regulation (EC) No 1272/2008, CLP.

Regulation (EC) No 648/2004 of the European Parliament and of the council on detergents.

National regulations EH40/2005 Workplace exposure limits.

Waste Ordinance (2011:927).

15.2. Chemical safety assessment

Not applicable

SECTION 16:Other information

Changes to previous revision	Changes are made in the following sections: 1, 2, 3, 15, 16.
References to key literature and data sources	Regulation (EC) No 1907/2006 of the European Parliament and of the Council, REACH. Regulation (EC) No 1272/2008 of the European Parliament and of the Council EH40/2005 Workplace exposure limits Waste Ordinance (2011:927). Regulation (EC) No 648/2004 of the European Parliament and of the council on detergents. Information also obtained from the constituent substances' safety data sheets.
Phrase meaning	Acute Tox. 4 - oral - Acute toxicity, oral, hazard category 4 Eye Irrit. 2 - Eye irritation, hazard category 2 Skin Corr. 1B - Skin corrosion, hazard category 1B Skin Irrit. 2 - Skin irritation, hazard category 2 H302 - Harmful if swallowed. H314 - Causes severe skin burns and eye damage. H315 - Causes skin irritation. H319 - Causes serious eye irritation.