This safety data sheet is prepared in accordance with EU directive 91/155/EC amended by directive 2001/58/EC.



SIGMACOVER 300 (SIGMA TCN 300) BASE

MSDS EU 01 / EN Version 1

Print Date 3/27/2007 Revision date 17-03-07

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product information

Trade name : SIGMACOVER 300 (SIGMA TCN 300) BASE

Recommended use : solvent based, two component coating base

Company : SigmaKalon Belgium N.V.

Tweemontstraat 104 2100 Deurne-Antwerpen

Telephone : +32 3 3606311

Telefax : +32 3 3606437

Emergency telephone number : +31 20 4075210

2. COMPOSITION/INFORMATION ON INGREDIENTS

Components	EC No.	CAS-No.	DSD	Note	Classification	Concentration
xylene	215-535-7	1330-20-7	25th	Nota C	R10 Xn; R20/21 Xi; R38	>=12.50 - <20.00%
ethylbenzene	202-849-4	100-41-4	19th		F; R11 Xn; R20	>=2.50 - <10.00%
epoxy resin (MW <=700)		25068-38-6	29th		Xi; R36/38 R43 N; R51, R53	>=5.00 - <10.00%
1-methoxy-2-propanol	203-539-1	107-98-2	19th		R10	>=1.00 - <2.50%
benzo[def]chrysene	200-028-5	50-32-8	29th		Carc.Cat.2; R45 Mut.Cat.2; R46 Repr.Cat.2; R60, R61 R43 N; R50, R53	>=0.10 - <0.25%
nonylphenol	246-672-0	25154-52-3	29th		Repr.Cat.3; R62 Repr.Cat.3; R63 Xn; R22 C; R34 N; R50, R53	>=0.25 - <1.00%
benz[a]anthracene	200-280-6	56-55-3	24th		Carc.Cat.2; R45 N; R50, R53	>=0.25 - <1.00%
benz(e)acephenanthrylene	205-911-9	205-99-2	26th		Carc.Cat.2; R45 N; R50, R53	>=0.25 - <1.00%

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benzo[k]fluoranthene	205-916-6	207-08-9	24th		Carc.Cat.2; R45 N; R50, R53	>=0.25 - <1.00%
dibenz[a,h]anthracene	200-181-8	53-70-3	29th		Carc.Cat.2; R45 N; R50, R53	>=0.01 - <0.10%
Naphthalene	202-049-5	91-20-3	29th		Carc.Cat.3; R40 Xn; R22 N; R50, R53	>=0.25 - <1.00%
2-Methylnaphthalene	202-078-3	91-57-6			N; R50/53 Xn; R22	>=0.25 - <1.00%
Creosote oil, acenaphthalene fraction	292-605-3	90640-84-9	29th	Nota H	Carc.Cat.2; R45	>=1.00 - <2.50%
Pitch, coal tar, high-temp.	266-028-2	65996-93-2	21st	Nota H	Carc.Cat.2; R45	>=10.00 - <25.00%
Distillates (coal tar), heavy oils	292-607-4	90640-86-1	21st	Nota H	Carc.Cat.2; R45	>=0.10 - <1.00%
epoxy resin (700 < MW <1000)		25068-38-6			Xi; R36/38 R43	>=2.50 - <5.00%
Phenanthrene	201-581-5	85-01-8			Xn; R22 N; R50/53	>=0.25 - <1.00%
Pyrene	204-927-3	129-00-0			T+; R26	>=0.10 - <1.00%
chrysene	205-923-4	218-01-9	29th		Carc.Cat.2; R45 Mut.Cat.3; R68 N; R50, R53	>=0.10 - <0.25%
benzo[e]pyrene	205-892-7	192-97-2	25th		Carc.Cat.2; R45 N; R50, R53	>=0.10 - <0.25%
biphenyl	202-163-5	92-52-4	21st		Xi; R36/37/38 N; R50, R53	>=0.10 - <0.25%
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For components with an occupational threshold limit value see chapter 8.

If multiple components with identical identifiers appear, these have different hazardous properties, e.g. flashpoint.

3. HAZARDS IDENTIFICATION

Hazardous components:

xylene
Pitch, coal tar, high-temp.
epoxy resin (MW <=700)
epoxy resin (700 < MW <1000)
Creosote oil, acenaphthalene fraction
Distillates (coal tar), heavy oils

R-phrase(s):

MAY CAUSE CANCER.
MAY CAUSE HERITABLE GENETIC DAMAGE.
ALSO HARMFUL BY INHALATION AND IN CONTACT WITH SKIN.
FLAMMABLE.
IRRITATING TO EYES AND SKIN.
MAY CAUSE SENSITIZATION BY SKIN CONTACT.

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TOXIC TO AQUATIC ORGANISMS, MAY CAUSE LONG-TERM ADVERSE EFFECTS IN THE AQUATIC ENVIRONMENT.

P-phrase(s):

Contains epoxy constituents. See information supplied by the manufacturer.

Restricted to professional users. Attention - Avoid exposure - obtain special instructions before use.

4. FIRST AID MEASURES

General advice : When symptoms persist or in all cases of doubt seek medical advice. Never

give anything by mouth to an unconscious person.

Eye contact : Irrigate copiously with clean, fresh water for at least 10 minutes, holding the

eyelids apart. Remove contact lenses. Seek medical advice.

Skin contact : Take off all contaminated clothing immediately. Wash skin thoroughly with

soap and water or use recognized skin cleanser. Do NOT use solvents or

thinners.

Inhalation : Remove to fresh air. Keep patient warm and at rest. If breathing is irregular

or stopped, administer artificial respiration. If unconscious place in recovery

position and seek medical advice.

Ingestion : If accidently swallowed obtain immediate medical attention. Keep at rest. Do

not induce vomiting.

Burns : If spills on clothing catch fire, wash with plenty of water. Remove loose

clothing. Do not remove clothing that has melted to the skin.Obtain medical

attention.

5. FIRE-FIGHTING MEASURES

Specific hazards during fire

fighting

: As the product contains combustible organic components, fire will produce dense black smoke containing hazardous products of combustion (see section

10). Exposure to decomposition products may be a hazard to health. Cool closed containers exposed to fire with water spray. Do not allow run-off from

fire fighting to enter drains or water courses.

Special protective equipment

for fire-fighters

Suitable extinguishing media

In the event of fire, wear self-contained breathing apparatus.

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Keep containers and surroundings cool with water spray.

Extinguishing media which must not be used for safety

reasons

Do NOT use water jet.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions : Use personal protective equipment. Ventilate the area. Refer to protective

measures listed in sections 7 and 8. Wear respiratory protection. Beware of vapours accumulating to form explosive concentrations. Vapours can

accumulate in low areas. Remove all sources of ignition.

Environmental precautions : Try to prevent the material from entering drains or water ways. If the product

contaminates rivers and lakes or drains inform respective authorities.

Methods for cleaning up : Clean with detergents. Avoid solvents. Contain and collect spillage with non-

combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national

regulations (see section 13).

Additional advice : Refer to section 15 for specific national regulation.

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7. HANDLING AND STORAGE

Handling

Safe handling advice Avoid exceeding of the given occupational exposure limits (see section 8).

> Use only in area provided with appropriate exhaust ventilation. Avoid contact with skin, eyes and clothing. Smoking, eating and drinking should be prohibited in the application area. Avoid inhalation of vapour or mist. For

personal protection see section 8.

Advice on protection against

fire and explosion

Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentration higher than the occupational exposure limits. When transferring from one container to another apply earthing measures and use conductive hose material. No sparking tools should be used. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours). The product should only be used in areas from which all naked lights and other sources of ignition have been excluded. No smoking. The accumulation of contaminated rags and dry overspray, particularly in spray booth filters, may result in spontaneous combustion. Good housekeeping standards, regular safe removal of waste materials and regular maintenance of spray booth filters will minimise the risks of

spontaneous combustion and other fire hazards.

Storage

Requirements for storage areas

and containers

Observe label precautions. Prevent unauthorized access. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Store between 5 and 25°C (41 - 77 F) in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. Solvent vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air. Electrical installations / working materials must comply with the technological safety standards. Keep away from sources of ignition - No smoking. Store in accordance with the particular national regulations (see

Keep away from oxidising agents and strongly acid or alkaline materials. Advice on common storage

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Minimum ventilated air quantity for 1 liter of product

TO REACH 10 % LEL 63 m3/l

Components on the national list and/or the European TLV list (98/24/EC):

Components	CAS-No.	Value	Value	Basis
		$[mg/m^3]$	[ppm]	

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xylene can be absorbed through skin	1330-20-7	221 442	50 100	EU ELV TWA EU ELV STEL
ethylbenzene can be absorbed through skin	100-41-4	442 884	100 200	EU ELV TWA EU ELV STEL
1-methoxy-2-propanol can be absorbed through skin	107-98-2	375 568	100 150	EU ELV TWA EU ELV STEL
Naphthalene	91-20-3	50	10	EU ELV TWA

Personal protective equipment

General advice

Respiratory protection: When operators, whether spraying or not, have to work inside the spray

booth, ventilation is unlikly to be sufficient to control particulates and solvent vapour in all cases. In such circumstances they should wear a compressed airfed respirator during the spraying process and until such time as the particulates and solvent vapour concentration has fallen below the exposure

limits.

Hand protection : For prolonged or repeated contact use protective gloves.

Barrier creams may help to protect the exposed areas of skin, they should

however not be applied once exposure has occurred.

Skin should be washed after contact.

Use chemical resistant gloves classified under Standard EN 374: Protective

gloves against chemicals and micro-organisms.

Recommended gloves: Viton

Minimum breakthrough time: 480 min

The recommended gloves are based on most common solvent in this product.

When prolonged or frequently repeated contact may occur, a glove with a protection class of 6 (breakthrough time greater than 480 minutes according to EN 374) is recommended. When only brief contact is expected, a glove with a protection class of 2 or higher (breakthrough time greater than 30

minutes according to EN 374) is recommended.

NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled,physicalrequirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glovematerials, as wellas the

instructions/specifications provided by the glove supplier.

Eye protection Skin and body protection : Chemical resistant goggles must be worn.

Personnel should wear protective clothing. Skin should be washed after contact. Working clothes must not consist of textiles, which show a dangerous melting behaviour in case of fire. Workers should wear antistatic

footwear.

Additional advice

Environmental protection : Refer to national regulations in chapter 15 for regulations on environmental

protection.

Personal protection

Protective equipment : Special work instructions

Please contact your personal protection equipment supplier for further advice

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9. PHYSICAL AND CHEMICAL PROPERTIES

Form : viscous

Colour

Odour : strong aromatic

Flash point : 31.2 °C

Autoignition temperature : >270 °C

Upper explosion limit : 7.92 %(V)

Lower explosion limit : 1.09 %(V)

Density : 1.54 g/cm3

at 20 °C

Water solubility : immiscible

pH

Viscosity, dynamic : 2,750 mPa.s at 23 °C

Flow time : >= 60 s

Transversal section: 6 mm

Method: ISO 2431 (EN 535) 6 mm CUP

10. STABILITY AND REACTIVITY

Conditions to avoid : Avoid temperatures above 60°C (140 F), direct sunlight and contact with

sources of heat.

Hazardous reactions : Keep away from oxidising agents, strongly alkaline and strongly acid

materials in order to avoid exothermic reactions.

Hazardous decomposition

products

In case of fire hazardous decomposition products may be produced such as:

Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx),

dense black smoke.

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity : May cause nausea, abdominal spasms and irritation of the mucous

membranes

Acute inhalation toxicity : Exposure to component solvent vapours concentration in excess of the stated

occupational exposure limit may result in adverse health effects. Such as: mucous membrane irritation, respiratory system irritation, adverse effects on kidney, liver and central nervous system. Symptoms and signs: headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases loss

of consciousness.

Skin irritation : Repeated or prolonged contact with the preparation may cause removal of

natural fat from the skin resulting in desiccation of the skin. The product may be absorbed through the skin. Repeated skin contact may lead to irritation and to senitization, possible with cross-sensitization to other epoxies.

Eye contact : Irritating to eyes.

Carcinogenicity : Note: High standards of skin care and personal hygiene should be exercised

at all times. Medical advice should be sought without delay if warts appear. Prolonged and repeated contact with the skin can lead to the development of warts. These can take various forms. A few are cancerous. These can be cured with early treatment. Based on the properties of the coal tar in this product, skin contact should be avoided preferably by use of a closed system. Where this is not possible, protective clothing, gloves and face shields should

be used to protect bare skin.

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Further information: There is no data available for this product.

Acute Toxicity Data for Components

nonylphenol (25154-52-3)

Acute oral toxicity:LD50: 1,620 mg/kg (rat)Acute inhalation toxicity:LC50: 2 mg/l (rat)

Naphthalene(91-20-3)

Acute oral toxicity : LD50: 1,780 mg/kg (rat)

Distillates (coal tar), heavy oils(90640-86-1)

 $\begin{array}{lll} \textbf{Acute oral toxicity} & : & LD50: 1,270 - 3,130 \text{ mg/kg (rat)} \\ \textbf{Acute dermal toxicity} & : & LD50: 3,180 \text{ mg/kg (rat)} \\ \end{array}$

12. ECOLOGICAL INFORMATION

Further information : The preparation has been assessed following the conventional method of the

Dangerous Preparations Directive 1999/45/EC and is classified for ecotoxicological properties accordingly. See sections 2 and 15 for details.

13. DISPOSAL CONSIDERATIONS

Product : The product should not be allowed to enter drains, water courses or the soil.

Disposal together with normal waste is not allowed. Special disposal required

according to local regulations.

Waste key for the unused

product

The European Waste Catalogue classification of this product, when disposed

of as waste is:

08 01 11 Waste paint and varnish containing organic solvents or other

dangerous substances.

If this product is fully cured or mixed with other wastes, this code may no longer apply. If mixed with other wastes, the appropriate code should be assigned. For further information contact your local waste authority

14. TRANSPORT INFORMATION

Transport within user's premises: always transport in closed containers that are upright, labelled and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport to be in accordance with ADR for road, IMDG for sea and IATA for air transport:

UN-No : 1263
Proper shipping name : PAINT
Class : 3
Packing group : III
Label : 3
Proper shipping name (ADR) : PAINT

Marine Pollutant (IMDG)(P,PP,-) : -

EmS (IMDG) : F-E, S-E

Limited quantity (ADR) : Max. per inner pack. : 5.00 L

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Limited quantity (IMDG)

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Max. per outer pack. : 30.00 KG Max. per inner pack. : 5.00 L

Max. per outer pack. : 30.00 KG

Note

If pack sizes less than 450L, under the terms of 2.2.3.1.5, this product is not subject to the provisions of ADR.

If pack sizes up to and including 30L, under the terms of 2.3.2.5, this product is not subject to the packaging, labelling and marking requirements of the IMDG code, but both full documentation and placarding of cargo transport units is still required.

15. REGULATORY INFORMATION

The product is classified and labelled in accordance with Directive 1999/45/EC.







Dangerous for the environment

Hazardous components which must be listed on the label:

- xylene
- Pitch, coal tar, high-temp.
- epoxy resin (MW <=700)
- epoxy resin (700 < MW <1000)
- Creosote oil, acenaphthalene fraction
- Distillates (coal tar), heavy oils

R-phrase(s)	: R45	May cause cancer.
	R46	May cause heritable

May cause heritable genetic damage.

Also harmful by inhalation and in contact with skin. R20/21

R10 Flammable.

R36/38 Irritating to eyes and skin.

May cause sensitization by skin contact. R43

R51/53 Toxic to aquatic organisms, may cause long-term

adverse effects in the aquatic environment.

S-phrase(s) S53 Avoid exposure - obtain special instructions before

use.

S23 Do not breathe spray.

S36/37 Wear suitable protective clothing and gloves. S38 In case of insufficient ventilation, wear suitable

respiratory equipment.

S45 In case of accident or if you feel unwell, seek medical

advice immediately (show the label where possible).

Avoid release to the environment. Refer to special S61

instructions/safety data sheets.

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Contains epoxy constituents. See information P-phrase(s)

supplied by the manufacturer.

Restricted to professional users. Attention - Avoid exposure - obtain special instructions before use.

The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation. The provisions of the national health and safety at work regulations apply to the use of this product at work.

National legislation

16. OTHER INFORMATION

This product contains a complex mixture of hydrocarbons. Detailed information can be obtained from the producer.

Explanation of R-phrases mentioned in section 2

xylene	R10 R20/21 R38	Flammable. Harmful by inhalation and in contact with skin. Irritating to skin.
ethylbenzene	R11 R20	Highly flammable. Harmful by inhalation.
epoxy resin (MW <=700)	R36/38 R43 R51/53	Irritating to eyes and skin. May cause sensitization by skin contact. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
1-methoxy-2-propanol	R10	Flammable.
benzo[def]chrysene	R45 R46 R60 R61 R43 R50/53	May cause cancer. May cause heritable genetic damage. May impair fertility. May cause harm to the unborn child. May cause sensitization by skin contact. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
nonylphenol	R22 R34 R62 R63 R50/53	Harmful if swallowed. Causes burns. Possible risk of impaired fertility. Possible risk of harm to the unborn child. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
benz[a]anthracene	R45 R50/53	May cause cancer. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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benz(e)acephenanthrylene	R45 R50/53	May cause cancer. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
benzo[k]fluoranthene	R45 R50/53	May cause cancer. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
dibenz[a,h]anthracene	R45 R50/53	May cause cancer. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Naphthalene	R22 R40 R50/53	Harmful if swallowed. Limited evidence of a carcinogenic effect. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
2-Methylnaphthalene	R22 R50/53	Harmful if swallowed. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Creosote oil, acenaphthalene fraction	R45	May cause cancer.
Pitch, coal tar, high-temp.	R45	May cause cancer.
Distillates (coal tar), heavy oils	R45	May cause cancer.
epoxy resin (700 < MW <1000)	R43 R36/38	May cause sensitization by skin contact. Irritating to eyes and skin.
Phenanthrene	R50/53 R22	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Harmful if swallowed.
Pyrene	R26	Very toxic by inhalation.
chrysene	R45 R68 R50/53	May cause cancer. Possible risk of irreversible effects. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
benzo[e]pyrene	R45 R50/53	May cause cancer. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
biphenyl	R36/37/38 R50/53	Irritating to eyes, respiratory system and skin. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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The information contained in this safety data sheet is based on the present state of knowledge and current European and National legislation at the date of issue. The supplier reserves the right to modify data on the safety data sheet without further notice. Any change in data will normally be followed by the issue of a new safety data sheet. The user should check the date of issue and if more than 12 months have elapsed, then the data should only be used after checking with the nearest sales office of the supplier to establish that the data is still valid. As the specific conditions of use of the product are outside the suppliers control, the supplier is not reponsible for the (negative) consequences of these specific conditions of use, which are outside of the suppliers. control and which are not compliant with the handling, storage and other instructions in this safety data sheet.

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mixed product. For further informati	on see technical data sl	neet number: 7472		