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



SIGMAFAST 20 (SIGMASTEEL QD)

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 : SIGMAFAST 20 (SIGMASTEEL QD)

Recommended use : solvent based, coating

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	>=20.00 - <25.00%
ethylbenzene	202-849-4	100-41-4	19th		F; R11 Xn; R20	>=2.50 - <10.00%
Trizinc bis(orthophosphate)	231-944-3	7779-90-0	29th		N; R50, R53	>=1.00 - <2.50%
2-butanone oxime	202-496-6	96-29-7	28th		Carc.Cat.3; R40 Xn; R21 Xi; R41 R43	>=0.10 - <1.00%

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

R-phrase(s):

FLAMMABLE.

HARMFUL BY INHALATION AND IN CONTACT WITH SKIN.

IRRITATING TO SKIN.

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

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P-phrase(s):

Contains: 2-butanone oxime May produce an allergic reaction.

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. Materials such as cleaning rags, paper wipes and protective clothing, which are contaminated with the product may spontaneously self-ignite some hours later. To avoid the risks of fires, all contaminated materials should be stored in purpose-built containers or in metal containers with tight-fitting selfclosing lids or laid out flat in a single layer to dry or placed in a closed metal container soaked with water or washed out well with warm soapy water before disposal. Contaminated materials should be removed from the workplace at the end of each working day and be stored outside. 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

section 15).

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

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Minimum ventilated air quantity for 1 liter of product

TO REACH 10 % LEL : 88 m3/l

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

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

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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 : Chemical resistant goggles must be worn.

Skin and body protection : 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

Density

Protective equipment : Enclosing glasses, safety gloves and P2A2 half-face combi mask

Please contact your personal protection equipment supplier for further advice

9. PHYSICAL AND CHEMICAL PROPERTIES

Form : viscous

Colour : various

Odour : strong aromatic

Flash point : 30.0 °C

Autoignition temperature : >480 °C

Upper explosion limit : 7.16 %(V)

Lower explosion limit : 1 %(V)

1.47 g/cm3 at 20 °C

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Water solubility : no data available

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Viscosity, dynamic : 800 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.

Eye contact : The liquid splashed in the eyes may cause irritation and reversible damage.

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

Acute Toxicity Data for Components

Trizinc bis(orthophosphate)(7779-90-0)

Acute oral toxicity : LD50: 552 mg/kg (mouse)

2-butanone oxime(96-29-7)

Acute inhalation toxicity : LC50: > 4.8 mg/l (rat)

Acute dermal toxicity : LD50: 1,000 - 1,800 mg/kg (rabbit)

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.

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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

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

Limited quantity (IMDG)

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



Hazardous components which must be listed on the label:

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xylene

R-phrase(s) : R10 Flammable.

R20/21 Harmful by inhalation and in contact with skin.

R38 Irritating to skin.

R52/53 Harmful to aquatic organisms, may cause long-term

adverse effects in the aquatic environment.

S-phrase(s) : S23 Do not breathe spray.

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

respiratory equipment.

S61 Avoid release to the environment. Refer to special

instructions/safety data sheets.

P-phrase(s) : Contains : 2-butanone oxime

May produce an allergic reaction.

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	Flammable.
	R20/21	Harmful by inhalation and in contact with skin.
	R38	Irritating to skin.
ethylbenzene	R11	Highly flammable.
	R20	Harmful by inhalation.
Trizinc bis(orthophosphate)	R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
2-butanone oxime	R21	Harmful in contact with skin.
	R40	Limited evidence of a carcinogenic effect.
	R41	Risk of serious damage to eyes.
	R43	May cause sensitization by skin contact.

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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

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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.

After all component(s) stated on the relevant Technical Data Sheet have been mixed the safety precautions mentioned on each of the component(s) safety data sheets and labels should be used in assessing the safety precautions of the mixed product.

For further information see technical data sheet number: 7155