



SAFETY DATA SHEET

Industrial Primers

According to Regulation (EC) No 1907/2006

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name Industrial Primers
Internal Id A779-780NF2

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

Identified uses Speciality Paint
Uses advised against Must not be handled in confined space without sufficient ventilation.

1.3. Details of the supplier of the safety data sheet

Supplier Plasti-Kote Ltd.
PO Box 867,
Pampisford,
Cambridge,
CB22 3XP
T : 44 (0) 1223 836400
F : 44 (0) 1223 836686
sds@plasti-kote.co.uk

1.4. Emergency telephone number

+44(0)1223 836400 (08:30am to 16:00pm Monday-Friday)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (1999/45/EEC) Xi;R36. F+;R12. R52/53, R66, R67.

Human health

In high concentrations, vapours and spray mists are narcotic and may cause headache, fatigue, dizziness and nausea. Acts as a defatting agent on skin. May cause cracking of skin, and eczema. Spray and vapour in the eyes may cause irritation and smarting.

Environment

The product contains a substance which is harmful to aquatic organisms and which may cause long term adverse effects in the aquatic environment.

Physical and Chemical Hazards

The product is extremely flammable, and explosive vapour/air mixtures may be formed even at normal room temperatures. Containers can burst violently when heated, due to excess pressure build-up.

2.2. Label elements

Labelling



Irritant



Extremely flammable

Risk Phrases

R12	Extremely flammable.
R36	Irritating to eyes.
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R66	Repeated exposure may cause skin dryness or cracking.

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Safety Phrases	R67	Vapours may cause drowsiness and dizziness.
	A1	Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.
	A2	Do not spray on a naked flame or any incandescent material.
	S2	Keep out of the reach of children.
	S16	Keep away from sources of ignition - No smoking.
	S23	Do not breathe vapour/spray.
	S24/25	Avoid contact with skin and eyes.
	S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
	S29	Do not empty into drains.
	S51	Use only in well-ventilated areas.

2.3. Other hazards

This product does not contain any PBT or vPvB substances.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

ACETONE		30-60%
CAS-No.: 67-64-1	EC No.: 200-662-2	
Classification (EC 1272/2008) Flam. Liq. 2 - H225 EUH066 Eye Irrit. 2 - H319 STOT Single 3 - H336	Classification (67/548/EEC) F;R11 Xi;R36 R66 R67	
XYLENE		5-10%
CAS-No.: 1330-20-7	EC No.: 215-535-7	
Classification (EC 1272/2008) Flam. Liq. 3 - H226 Acute Tox. 4 - H312 Acute Tox. 4 - H332 Skin Irrit. 2 - H315	Classification (67/548/EEC) R10 Xn;R20/21 Xi;R38	
BUTANE		5-10%
CAS-No.: 106-97-8	EC No.: 203-448-7	
Substance with National workplace exposure limits		
Classification (EC 1272/2008) Flam. Gas 1 - H220	Classification (67/548/EEC) F+;R12	
TITANIUM DIOXIDE		1-5%
CAS-No.: 13463-67-7	EC No.: 236-675-5	
Substance with National workplace exposure limits		
Classification (EC 1272/2008) Not classified.	Classification (67/548/EEC) Not classified.	

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KAOLIN	1-5%
CAS-No.: 1332-58-7 EC No.:	
Classification (EC 1272/2008) Not classified.	Classification (67/548/EEC) Not classified.
ISOBUTYL ACETATE	1-5%
CAS-No.: 110-19-0 EC No.: 203-745-1	
Classification (EC 1272/2008) Flam. Liq. 2 - H225 EUH066	Classification (67/548/EEC) F;R11 R66
STODDARD SOLVENT (<0.1 % BENZENE)	1-5%
CAS-No.: 8052-41-3 EC No.: 232-489-3	
Classification (EC 1272/2008) Flam. Liq. 3 - H226 EUH066 Asp. Tox. 1 - H304 Aquatic Chronic 2 - H411	Classification (67/548/EEC) Xn;R65. N;R51/53. R10,R66.
BARIUM METABORATE	1-5%
CAS-No.: 13701-59-2 EC No.: 237-222-4	
Classification (EC 1272/2008) Acute Tox. 4 - H302 Acute Tox. 4 - H332	Classification (67/548/EEC) Xn;R20/22.
ETHYLBENZENE	1-5%
CAS-No.: 100-41-4 EC No.: 202-849-4	
Classification (EC 1272/2008) Flam. Liq. 2 - H225 Acute Tox. 4 - H332	Classification (67/548/EEC) F;R11 Xn;R20
IRON OXIDE	1-5%
CAS-No.: 1309-37-1 EC No.: 215-168-2	
Substance with National workplace exposure limits	
Classification (EC 1272/2008) Not classified.	Classification (67/548/EEC) Not classified.
CARBON BLACK	< 1%
CAS-No.: 1333-86-4 EC No.: 215-609-9	
Classification (EC 1272/2008) Not classified.	Classification (67/548/EEC) Not classified.

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AMORPHOUS SILICA	< 1%
CAS-No.: 112926-00-8	EC No.:
Classification (EC 1272/2008) STOT Single 3 - H335	Classification (67/548/EEC) Xi;R37.
ETHANOL	< 1%
CAS-No.: 64-17-5	EC No.: 200-578-6
Classification (EC 1272/2008) Flam. Liq. 2 - H225	Classification (67/548/EEC) F;R11

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation

Move the exposed person to fresh air at once. Place unconscious person on the side in the recovery position and ensure breathing can take place. Keep the affected person warm and at rest. Get prompt medical attention.

Ingestion

Immediately rinse mouth and provide fresh air. Do not induce vomiting. Get medical attention if any discomfort continues.

Skin contact

Wash skin with soap and water. Get medical attention if any discomfort continues.

Eye contact

Spray in the eyes: Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

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

General information

The severity of the symptoms described will vary dependant of the concentration and the length of exposure.

Inhalation.

Vapours may cause headache, fatigue, dizziness and nausea. In case of overexposure, organic solvents may depress the central nervous system causing dizziness and intoxication, and at very high concentrations unconsciousness and death.

Ingestion

Due to the physical nature of this material it is unlikely that swallowing will occur. May cause nausea, headache, dizziness and intoxication.

Skin contact

Prolonged or repeated contact with skin may cause redness, itching, irritation and eczema/chapping.

Eye contact

Irritation of eyes and mucous membranes.

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

Not applicable.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

Extinguish with foam, carbon dioxide, dry powder or water fog.

Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

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Unusual Fire & Explosion Hazards

Aerosol cans may explode in a fire. The product is extremely flammable, and explosive vapour/air mixtures may be formed even at normal room temperatures. Vapours are heavier than air and may spread near ground to sources of ignition.

Specific hazards

Pressurised container: Must not be exposed to temperatures above 50°C.

5.3. Advice for firefighters

Special Fire Fighting Procedures

Cool aerosol containers exposed to heat with water spray and remove container, if no risk is involved. Use water spray to reduce vapours.

Protective equipment for fire-fighters

Wear full protective clothing. Use air-supplied respirator during fire fighting.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Avoid inhalation of vapours and aerosol spray. In case of inadequate ventilation use suitable respirator. Avoid contact with skin and eyes.

6.2. Environmental precautions

Exposure to aquatic environment unlikely. Avoid discharge into drains.

6.3. Methods and material for containment and cleaning up

Ventilate well. Clean contaminated area with oil-removing material.

6.4. Reference to other sections

For personal protection, see section 8. See section 11 for additional information on health hazards. For waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Read and follow manufacturer's recommendations. During application and drying, solvent vapours will be emitted. Avoid inhalation of vapours and spray mists. Keep away from heat, sparks and open flame. When sprayed on a naked flame or any incandescent material the aerosol vapours can be ignited.

7.2. Conditions for safe storage, including any incompatibilities

Aerosol cans: Must not be exposed to direct sunlight or temperatures above 50°C. Keep away from heat, sparks and open flame. Store in a cool and well-ventilated place.

7.3. Specific end use(s)

Paint.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

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Name	STD	TWA - 8 Hrs		STEL - 15 Min		Notes
ACETONE	WEL	500 ppm	1210 mg/m ³	1500 ppm	3620 mg/m ³	
AMORPHOUS SILICA	WEL		2,4 mg/m ³			
BARIUM METABORATE	WEL		0,5 mg/m ³			as Ba
BUTANE	WEL	600 ppm	1450 mg/m ³	750 ppm	1810 mg/m ³	
CARBON BLACK	WEL		3,5 mg/m ³		7 mg/m ³	
ETHANOL	WEL	1000 ppm	1920 mg/m ³			
ETHYLBENZENE	WEL	100 ppm	441 mg/m ³	125 ppm	552 mg/m ³	Sk
IRON OXIDE	WEL		5 mg/m ³		10 mg/m ³	as Fe
ISOBUTYL ACETATE	WEL	150 ppm	724 mg/m ³	187 ppm	903 mg/m ³	
KAOLIN	WEL		2 mg/m ³			
TITANIUM DIOXIDE	WEL		4 mg/m ³			
XYLENE	WEL	50 ppm	220 mg/m ³	100 ppm	441 mg/m ³	Sk

WEL = Workplace Exposure Limit.

Sk = Can be absorbed through skin.

8.2. Exposure controls

Protective equipment



Respiratory equipment

If ventilation is insufficient, suitable respiratory protection must be provided. Wear mask supplied with: Gas cartridge suitable for organic substances.

Hand protection

Skin irritation is not anticipated when used normally. For prolonged or repeated skin contact use suitable protective gloves. Use protective gloves made of: Butyl rubber. Nitrile. Be aware that the liquid may penetrate the gloves. Frequent change is advisable.

Eye protection

Wear approved chemical safety goggles where eye exposure is reasonably probable.

Hygiene measures

When using do not eat, drink or smoke. Wash promptly with soap & water if skin becomes contaminated. Wash at the end of each work shift and before eating, smoking and using the toilet. Promptly remove non-impervious clothing that becomes contaminated.

Thermal hazards

Contains petroleum gas, liquefied. Contact with liquid form may cause frostbite.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Aerosol.
Colour	Misc. colours.
Odour	Organic solvents.
Solubility	Immiscible with water Soluble in: Organic solvents.
Initial boiling point and boiling range	-42 °C - 0 °C @ 760 mm Hg (petroleum gas)
Melting point (°C)	Not available.
Relative density	Technically not feasible. ~ 0.85

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Vapour density (air=1)	>1
Flash point (°C)	< -60°C CC (Closed cup). (petroleum gas)
Auto Ignition Temperature (°C)	~ 450 °C (petroleum gas)
Flammability Limit - Lower(%)	2 % (petroleum gas)
Flammability Limit - Upper(%)	10 % (petroleum gas)

9.2. Other information

Volatility Description Highly volatile.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No specific reactivity hazards associated with this product.

10.2. Chemical stability

Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions

Not applicable.

Hazardous Polymerisation

Will not polymerise.

10.4. Conditions to avoid

When sprayed on a naked flame or any incandescent material the aerosol vapours can be ignited. Avoid heat, flames and other sources of ignition. Aerosol containers can explode when heated, due to excessive pressure build-up. Avoid exposure to high temperatures or direct sunlight.

10.5. Incompatible materials

Materials To Avoid

Strong oxidising substances.

10.6. Hazardous decomposition products

None at ambient temperatures. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Inhalation

In high concentrations, vapours are narcotic and may cause headache, fatigue, dizziness and nausea.

Ingestion

No harmful effects expected in amounts likely to be ingested by accident. May cause discomfort if swallowed. May irritate and cause stomach pain, vomiting and diarrhoea.

Skin contact

Skin irritation is not anticipated when used normally. Repeated exposure may cause skin dryness or cracking.

Eye contact

Irritating to eyes. Spray and vapour in the eyes may cause irritation and smarting.

Route of entry

Inhalation. Skin and/or eye contact.

Target Organs

Eyes Central nervous system Respiratory system, lungs

Name	XYLENE
Toxic Dose 1 - LD 50	3523 mg/kg (oral rat)
Toxic Dose 2 - LD 50	>4200 mg/kg (dermal rabbit)
Toxic Conc. - LC 50	6700 ppm/4h (inh-rat)

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Name	ETHYLBENZENE
Toxic Dose 1 - LD 50	3500 mg/kg (oral rat)
Toxic Dose 2 - LD 50	15400 mg/kg (dermal rabbit)
Toxic Conc. - LC 50	4000 ppm/4h (inh-rat)
Name	ACETONE
Toxic Dose 1 - LD 50	5800 mg/kg (oral rat)
Toxic Dose 2 - LD 50	20000 mg/kg (dermal rabbit)
Toxic Conc. - LC 50	76 mg/l/4h (inh-rat)
Name	ISOBUTYL ACETATE
Toxic Dose 1 - LD 50	13413 mg/kg (oral rat)
Toxic Dose 2 - LD 50	>17400 mg/kg (dermal rabbit)
Toxic Conc. - LC 50	~ 30 mg/l/4h (inh-rat)
Name	TITANIUM DIOXIDE
Toxic Dose 1 - LD 50	>5000 mg/kg (oral rat)
Toxic Conc. - LC 50	> 6.82 mg/l/4h (inh-rat)

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

The product contains a substance which is toxic to aquatic organisms and which may cause long term adverse effects in the aquatic environment. Dangerous for the environment if discharged into watercourses. Do not allow to enter drains, sewers or watercourses.

12.1. Toxicity

Acute Fish Toxicity

The product contains a substance which is harmful to aquatic organisms and which may cause long term adverse effects in the aquatic environment.

12.2. Persistence and degradability

Degradability

The product contains volatile organic compounds (VOC) which will evaporate easily from all surfaces. Volatile substances are degraded in the atmosphere within a few days.

12.3. Bioaccumulative potential

Bioaccumulative potential

The product does not contain any substances expected to be bioaccumulating.

12.4. Mobility in soil

Mobility:

The product is immiscible with water and will spread on the water surface. The product contains volatile organic compounds (VOC) which will evaporate easily from all surfaces.

12.5. Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB substances.

12.6. Other adverse effects

Not applicable.

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Name	XYLENE
Partition Coefficient	2.77-3.15
LC 50, 96 Hrs, Fish mg/l	2.6 mg/L Onchorhyncus Mykiss
EC 50, 48 Hrs, Daphnia, mg/l	1 mg/L (24 h) Daphnia magna
IC 50, 72 Hrs, Algae, mg/l	4.36 mg/L Selenastrum capricornutum

Mobility

Volatile The product is insoluble in water and will spread on the water surface.

Bioaccumulative potential

Will not bio-accumulate.

Name	ETHYLBENZENE
Partition Coefficient	3.6
LC 50, 96 Hrs, Fish mg/l	4.2 mg/L Onchorhyncus mykiss
EC 50, 48 Hrs, Daphnia, mg/l	1.8-2.4 mg/L Daphnia magna
IC 50, 72 Hrs, Algae, mg/l	5.4 mg/L Selenastrum capricornutum

Mobility

Volatile The product is immiscible with water and will spread on the water surface.

Bioaccumulative potential

Will not bio-accumulate.

Degradability

The substance is readily biodegradable.

Name	ACETONE
Partition Coefficient	- 0.24
LC 50, 96 Hrs, Fish mg/l	5540 mg/L Onchorhyncus Mykiss (Rainbow Trout)
EC 50, 48 Hrs, Daphnia, mg/l	12700 mg/L Daphnia Magna
IC 50, 72 Hrs, Algae, mg/l	7000 mg/L Selenastrum capricornutum

Mobility

Highly volatile. The product is water soluble and may spread in water systems.

Bioaccumulative potential

The product is not bioaccumulating.

Degradability

The product is easily biodegradable.

Name	ISOBUTYL ACETATE
Partition Coefficient	2.3
LC 50, 96 Hrs, Fish mg/l	17 mg/L Oryzias Latipes
EC 50, 48 Hrs, Daphnia, mg/l	25 mg/L Daphnia magna
IC 50, 72 Hrs, Algae, mg/l	370 mg/L Selenastrum capricornutum)

Mobility

Volatile The product is insoluble in water and will spread on the water surface.

Bioaccumulative potential

The product is not bioaccumulating.

Degradability

The product is biodegradable.

Name	TITANIUM DIOXIDE
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Mobility

The product is non-volatile. The product is insoluble in water and will sediment in water systems.

Bioaccumulative potential

Will not bio-accumulate.

Degradability

The product is not biodegradable.

SECTION 13: DISPOSAL CONSIDERATIONS

General information

When handling waste, consideration should be made to the safety precautions applying to handling of the product. Do not puncture or incinerate even when empty.

13.1. Waste treatment methods

Make sure containers are empty before discarding (explosion risk). Do not puncture or incinerate even when empty. Dispose of waste and residues in accordance with local authority requirements.

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SECTION 14: TRANSPORT INFORMATION

14.1. UN number

UN No. (ADR/RID/ADN)	1950
UN No. (IMDG)	1950
UN No. (ICAO)	1950

14.2. UN proper shipping name

Proper Shipping Name AEROSOLS (IATA : Aerosols, flammable)

14.3. Transport hazard class(es)

ADR/RID/ADN Class	2 (5F)
ADR Label No.	2.1
IMDG Class	2.1
ICAO Class/Division	2.1
Transport Labels	



14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant

No.

14.6. Special precautions for user

EMS	F-D, S-U
Tunnel Restriction Code	(D)

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

Not relevant

SECTION 15: REGULATORY INFORMATION

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

Environmental Listing

No listing noted.

Statutory Instruments

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716).

Approved Code Of Practice

British Aerosol Manufacturers Association Standard

EU Legislation

Dangerous Preparations Directive 1999/45/EC. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments.

National Regulations

The Aerosol Dispensers Regulations 2009 (SI 2824) The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716).

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Health and Environmental Listings

Regulation EC 2037/2000 on substances that deplete the ozone layer. Regulation EC 850/2004 on persistent organic pollutants. Regulation EC 689/2008 concerning the export and import of dangerous chemicals. None of the ingredients are listed.

Authorisations (Title VII Regulation 1907/2006)

No specific authorisations are noted for this product.

Restrictions (Title VIII Regulation 1907/2006)

No specific restrictions of use are noted for this product.

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

Revision Date 12/08/2011

Supersedes date 28/04/2011

Risk Phrases In Full

R12 Extremely flammable.
R10 Flammable.
R20/22 Harmful by inhalation and if swallowed.
R20/21 Harmful by inhalation and in contact with skin.
R20 Harmful by inhalation.
R65 Harmful: may cause lung damage if swallowed.
R11 Highly flammable
R36 Irritating to eyes.
R37 Irritating to respiratory system.
R38 Irritating to skin.
NC Not classified.
R66 Repeated exposure may cause skin dryness or cracking.
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R67 Vapours may cause drowsiness and dizziness.

Hazard Statements In Full

EUH066 Repeated exposure may cause skin dryness or cracking.
H220 Extremely flammable gas.
H225 Highly flammable liquid and vapour.
H226 Flammable liquid and vapour.
H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
H312 Harmful in contact with skin.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H411 Toxic to aquatic life with long lasting effects.

Disclaimer

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.