FlintGroup

SAFETY DATA SHEET

PENETRATION +; 10LT

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

Product code	:	KU400PPG01
Product name	:	PENETRATION +; 10LT
Manufacturer / Distributor	:	Flint Group, Print Media Europe, Varn House, Northbank Industrial Park, Irlam, Greater Manchester, M44 5BL England.
e-mail address of person responsible for this SDS	:	compliance.centre@flintgrp.com
Telephone no.	:	+44 (0) 161 775 5412
Product use	:	Printing ink or Additive

History

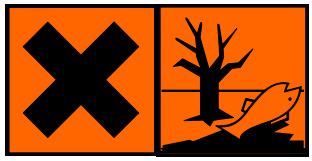
Date of printing	:	22.06.2011.
Date of issue/ Date of revision	:	17.11.2010.
Date of previous issue	:	No previous validation.
Version	:	3

2. HAZARDS IDENTIFICATION

Classification and labeling according to Regulation (EC) 1907/2006 (REACH)

Classification and labeling have been determined according to EU Directives 67/548/EEC and 1999/45/EC (including amendments) and take into account the intended product use.

The product is classified as dangerous according to Directive 1999/45/EC and its amendments.

Classification	:	R10 Xn; R65 Xi; R36/37 R66, R67 N; R51/53
Physical/chemical hazards	:	Flammable.
Human health hazards	:	Harmful: may cause lung damage if swallowed. Irritating to eyes and respiratory system. Repeated exposure may cause skin dryness or cracking. Vapors may cause drowsiness and dizziness.
Environmental hazards	:	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Hazard symbol or symbols	:	

Harmful, Dangerous for the environment

2. HAZARDS IDENTIFICATION

Risk phrases : R10- Flammable.
R65- Harmful: may cause lung damage if swallowed.
R36/37- Irritating to eyes and respiratory system.
R66- Repeated exposure may cause skin dryness or cracking.
R67- Vapors may cause drowsiness and dizziness.
R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrases : S23- Do not breathe gas, fumes or vapor.
S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S43- In case of fire, use dry chemical powder.
S60- This material and its container must be disposed of as hazardous waste.
S61- Avoid release to the environment. Refer to special instructions/safety data sheet.
S62- If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

Contains :

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances presenting a health or environmental hazard within the meaning of the Dangerous Substances Directive 67/548/EEC.

Chemical name	%	REACH Registration number	CAS number	EC number	Classification	
solvent naphtha (petroleum), light arom.	25-35		64742-95-6	265-199-0	R10 Xn; R65 R66, R67 N; R51/53	**[1]**
1,2,4-trimethylbenzene	10-20		95-63-6	202-436-9	R10 Xn; R20 Xi; R36/37/38 N; R51/53	**[1]** **[2]**
(2-methoxymethylethoxy)propanol	10-15		34590-94-8	252-104-2	Not classified.	**[2]**
naphtha (petroleum), hydrodesulfurized heavy	2.5-10		64742-82-1		R10 Xn; R65 R66, R67 N; R51/53	**[1]**
mesitylene	2.5-25		108-67-8		R10 Xi; R37 N; R51/53	**[1]** **[2]**
cumene	1-2.5		98-82-8	202-704-5	R10 Xn; R65 Xi; R37 N; R51/53	**[1]** **[2]**
ethoxylated fatty alcohol	1-3		9043-30-5	500-027-2	Xn; R22 Xi; R41	**[1]**

See section 16 for the full text of the R-phrases declared above

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

[3] PBT-substance

[4] vPvB-substance

3. COMPOSITION/INFORMATION ON INGREDIENTS

Occupational exposure limits, if available, are listed in section 8.

Hazardous ingredients / Classification according to Regulation (EC) 1272/2008 (CLP)

Chemical name	CAS number	Classification
solvent naphtha (petroleum), light arom.	64742-95-6	FLAMMABLE LIQUIDS - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) [Respiratory tract irritation and Narcotic effects] - Category 3 ASPIRATION HAZARD - Category 1 AQUATIC TOXICITY (CHRONIC) - Category 2
1,2,4-trimethylbenzene	95-63-6	FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY: INHALATION - Category 4 SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) [Respiratory tract irritation] - Category 3 AQUATIC TOXICITY (CHRONIC) - Category 2
(2-methoxymethylethoxy)propanol	34590-94-8	Not regulated.
naphtha (petroleum), hydrodesulfurized heavy	64742-82-1	FLAMMABLE LIQUIDS - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) [Narcotic effects] - Category 3 ASPIRATION HAZARD - Category 1 AQUATIC TOXICITY (CHRONIC) - Category 2
mesitylene	108-67-8	FLAMMABLE LIQUIDS - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) [Respiratory tract irritation] - Category 3 AQUATIC TOXICITY (CHRONIC) - Category 2
cumene	98-82-8	FLAMMABLE LIQUIDS - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) [Respiratory tract irritation] - Category 3 ASPIRATION HAZARD - Category 1 AQUATIC TOXICITY (CHRONIC) - Category 2
ethoxylated fatty alcohol	9043-30-5	ACUTE TOXICITY: ORAL - Category 4 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1

4. FIRST AID MEASURES

First aid measures

General : In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and seek medical advice.

Inhalation : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.

Skin contact : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.

Eye contact : Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention/advice.

Ingestion : If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Give nothing by mouth. Do NOT induce vomiting.

5. FIRE-FIGHTING MEASURES

Extinguishing media : Recommended:, alcohol-resistant foam, CO_2, powders, water spray

Extinguishing media not to be used : Do not use water jet.

Recommendations : Fire will produce dense black smoke., Exposure to decomposition products may cause a health hazard., Appropriate breathing apparatus may be required., Cool closed containers exposed to fire with water., Do not release runoff from fire to drains or watercourses.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions : Exclude sources of ignition and ventilate the area. Avoid breathing vapor or spray. Refer to protective measures listed in sections 7 and 8.

Environmental precautions : Do not allow to enter drains or watercourses. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.

Methods for cleaning up : Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Preferably clean with a detergent. Avoid using solvents.

Note: see section 8 for personal protective equipment and section 13 for waste disposal.

7. HANDLING AND STORAGE

Handling : Vapors are heavier than air and may spread along floors. Vapors may form explosive mixtures with air. Prevent the creation of flammable or explosive concentrations of vapors in air and avoid vapor concentrations higher than the occupational exposure limits. In addition, the product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard. To dissipate static electricity during transfer, ground drum and connect to receiving container with bonding strap. Operators should wear antistatic footwear and clothing and floors should be of the conducting type. Keep container tightly closed. Keep away from heat, sparks and flame. No sparking tools should be used. Avoid contact with skin and eyes. Avoid the inhalation of dust, particulates, spray or mist arising from the application of this preparation. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Put on appropriate personal protective equipment (see section 8). Always keep in containers made from the same material as the original one. Comply with the health and safety at work laws.

Storage : Store in accordance with local regulations. Observe label precautions. Store in a dry, cool and well-ventilated area. Keep away from heat and direct sunlight.
Keep away from sources of ignition. Keep away from: oxidizing agents, strong alkalis, strong acids.
No smoking. Prevent unauthorized access. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not empty into drains.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredient name	Occupational exposure limits
1,2,4-trimethylbenzene	**EH40/2005 WELs (United Kingdom (UK), 8/2007).** TWA: 125 mg/m³ 8 hour(s). TWA: 25 ppm 8 hour(s).
(2-methoxymethylethoxy)propanol	**EH40/2005 WELs (United Kingdom (UK), 8/2007). Absorbed through skin.** TWA: 308 mg/m³ 8 hour(s). TWA: 50 ppm 8 hour(s).
mesitylene	**EH40/2005 WELs (United Kingdom (UK), 8/2007).** TWA: 125 mg/m³ 8 hour(s). TWA: 25 ppm 8 hour(s).
cumene	**EH40/2005 WELs (United Kingdom (UK), 8/2007). Absorbed through skin.** STEL: 250 mg/m³ 15 minute(s). STEL: 50 ppm 15 minute(s). TWA: 125 mg/m³ 8 hour(s). TWA: 25 ppm 8 hour(s).

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure controls : Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapors below the OEL, suitable respiratory protection must be worn.

Occupational exposure controls

Respiratory system : If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators.

Skin and body : Personnel should wear antistatic clothing made of natural fibers or of high-temperature-resistant synthetic fibers.

Hands : The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment.

Gloves : For prolonged or repeated handling, use the following type of gloves:

May be used: nitrile rubber, neoprene

Gloves : None available.

Eyes : Use safety eyewear designed to protect against splash of liquids.

Environmental exposure controls : Do not allow to enter drains or watercourses.

9. PHYSICAL AND CHEMICAL PROPERTIES

General information

Appearance

Physical state : Liquid.

Color : Colorless.

Odor : Hydrocarbon.

Odor threshold : Not available.

Important health, safety and environmental information

pH : Not available.

Boiling point : >= 100 °C

Melting point : Not available.

Flash point : Closed cup: 45°C [THEORETICAL]

Explosive properties : Non-explosive in the presence of the following materials or conditions: shocks and mechanical impacts.

Lower explosion limit : 1 %Vol

Oxidizing properties : Not available.

Vapor pressure : <= 23 hPa

Density : ~ 0.9 g/cm³

Solubility : insoluble in water.

Octanol/water partition coefficient : Not available.

Viscosity : Kinematic (40°C (104°F)): <0.06 cm^2/s (<6 cSt)

Vapor density : Not available.

Evaporation rate : Not available.

Decomposition temperature : Not available.

Auto-ignition temperature : ca 425 °C

10. STABILITY AND REACTIVITY

Conditions to avoid : Stable under recommended storage and handling conditions (see section 7). When exposed to high temperatures may produce hazardous decomposition products.

Materials to avoid : Keep away from the following materials to prevent strong exothermic reactions: oxidizing agents, strong alkalis, strong acids.

Hazardous decomposition products : Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

11. TOXICOLOGICAL INFORMATION

There is no data available on the preparation itself. The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and classified for toxicological hazards accordingly. See sections 3 and 15 for details.

Exposure to component solvent vapor concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin. Ingestion may cause gastrointestinal irritation and diarrhea. If splashed in the eyes, the liquid may cause irritation and reversible damage.

Toxicokinetics

Absorption : Not available.

Distribution : Contains material which causes damage to the following organs: eye, lens or cornea. Contains material which may cause damage to the following organs: blood, upper respiratory tract, skin, central nervous system (CNS).

Metabolism : Not available.

Elimination : Not available.

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
solvent naphtha (petroleum), light arom.	LD50 Oral	Rat	8400 mg/kg	-
1,2,4-trimethylbenzene	LC50 Inhalation Vapor	Rat	18000 mg/m3	4 hours
	LD50 Oral	Rat	5 g/kg	-
mesitylene	LC50 Inhalation Vapor	Rat	24000 mg/m3	4 hours
	LD50 Oral	Rat	5000 mg/kg	-
cumene	LC50 Inhalation Vapor	Rat	39000 mg/m3	4 hours
	LD50 Oral	Rat	1400 mg/kg	-

Chronic toxicity : Not available.

Carcinogenicity : Not available.

Mutagenicity : Not available.

Teratogenicity : Not available.

Reproductive toxicity : Not available.

12. ECOLOGICAL INFORMATION

There is no data available on the preparation itself.
Do not allow to enter drains or watercourses.

The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and is classified for eco-toxicological properties accordingly. See sections 3 and 15 for details.

Aquatic ecotoxicity

Product/ingredient name	Result	Species	Exposure

12. ECOLOGICAL INFORMATION

1,2,4-trimethylbenzene	Acute LC50 17000 ug/L Marine water	Crustaceans - Cancer magister - Zoea	48 hours
	Acute LC50 7720 ug/L Fresh water	Fish - Pimephales promelas - 34 days	96 hours
mesitylene	Acute LC50 13000 ug/L Marine water	Crustaceans - Cancer magister - Zoea	48 hours
	Acute LC50 12520 ug/L Fresh water	Fish - Carassius auratus - 1 to 1.5 years - 13 to 20 cm - 20 to 80 g	96 hours
cumene	Acute EC50 7400 to 11290 ug/L Fresh water	Crustaceans - Artemia sp. - Nauplii	48 hours
	Acute EC50 10600 to 14100 ug/L Fresh water	Daphnia - Daphnia magna - Neonate - <=24 hours	48 hours
	Acute LC50 2700 ug/L Fresh water	Fish - Oncorhynchus mykiss	96 hours

Ecological information

Persistence/degradability

Product/ingredient name	Test	Result	Dose	Inoculum
Not available.				

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Not available.			

Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
Not available.			

PBT : Not applicable.

vPvB : Not applicable.

13. DISPOSAL CONSIDERATIONS

Do not allow to enter drains or watercourses.
Dispose of according to all federal, state and local applicable regulations.

Methods of disposal : The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

European waste catalogue (EWC) : The European Waste Catalogue classification of this product, when disposed of as waste, is: 08 03 12* waste ink containing dangerous substances If this product is 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.

Hazardous waste : Yes.

14. TRANSPORT INFORMATION

International transport regulations

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

UN number	Proper shipping name	Classes	PG*	Label
UN1210	PRINTING INK RELATED MATERIAL	3	III	

PG* : Packing group

Additional information ADR ADN/ADNR	:	**Classification code**	F1
		Special provisions	163 640E
		Hazard identification number	30
		Limited quantity	LQ7
Additional information IMDG	:	**Emergency schedules (EmS)**	F-E, S-D
		Marine pollutant	Yes.
		Marine pollutant substances	Solvent naphtha (petroleum), light arom., 1,2,4-trimethylbenzene
		Limited quantity	5 l

Additional information IATA :		**Max. Qty**	**Packaging instruction**
	Passenger and Cargo Aircraft	60 L	310
	Cargo Aircraft Only	220 L	309
	Limited quantity	10 L	Y309

15. REGULATORY INFORMATION

Chemical Safety Assessment : This product contains substances for which Chemical Safety Assessments are still required.

EU regulations : The product is classified as dangerous according to Directive 1999/45/EC and its amendments.

See sections 2 and 3 for details.

VOC content : ~ 79.5 % ~ 707.9 g/L

Europe inventory : All components are listed or exempted.

Industrial 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.

16. OTHER INFORMATION

CEPE MSDS Code : 1

16. OTHER INFORMATION

Full text of R-phrases referred to in sections 2 and 3 - Europe : R10- Flammable.
R20- Harmful by inhalation.
R22- Harmful if swallowed.
R65- Harmful: may cause lung damage if swallowed.
R41- Risk of serious damage to eyes.
R37- Irritating to respiratory system.
R36/37- Irritating to eyes and respiratory system.
R36/37/38- Irritating to eyes, respiratory system and skin.
R66- Repeated exposure may cause skin dryness or cracking.
R67- Vapors may cause drowsiness and dizziness.
R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

The information in this Safety Data Sheet is required pursuant to EU Directive 91/155/EEC and its amendments.

Date of issue/Date of revision : **17.11.2010.**

Version : **3**

Indicates information that has changed from previously issued version.

Notice to reader

The information in this SDS is based on the present state of our knowledge and on current laws. The product is not to be used for purposes other than those specified under section 1 without first obtaining written handling instructions. It is always the responsibility of the user to take all necessary steps to fulfill the demands set out in the local rules and legislation. The information in this SDS is meant to be a description of the safety requirements for our product. It is not to be considered a guarantee of the product's properties.