1 / 5

REVISION DATE: 01/03/2006 SDS No.: 10703



SAFETY DATA SHEET MAKE UP/FLUSH FOR JET7237

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

PRODUCT NAME MAKE UP/FLUSH FOR JET7237

PRODUCT NO. JET0234

APPLICATION Inkjet Printing ink.

SUPPLIER SunJet

Norton Hill Midsomer Norton Bath, Somerset BA3 4RT

UK

T +44 (0) 1761-414471 F +44 (0) 1761-418544

EMERGENCY TELEPHONE +44 (0) 1761 408646

2 COMPOSITION/INFORMATION ON INGREDIENTS

Name	EC No.	CAS-No.	Content	Classification
BUTANONE	201-159-0	78-93-3	80-95%	F;R11 Xi;R36 R66 R67
ETHANOL	200-578-6	64-17-5	5-10%	F;R11
BUTANOL-norm	200-751-6	71-36-3	1-5%	R10 Xn;R22 Xi;R37/38,R41 R67

The Full Text for all R-Phrases are Displayed in Section 16

COMPOSITION COMMENTS

The Data Shown is in accordance with the latest EC Directives.

3 HAZARDS IDENTIFICATION

Highly flammable. Irritating to eyes. Repeated exposure may cause skin dryness or cracking. Vapours may cause drowsiness and dizziness.

CLASSIFICATION Xi;R36. F;R11. R66, R67.

4 FIRST-AID MEASURES

GENERAL INFORMATION

Remove victim immediately from source of exposure. General first aid, rest, warmth and fresh air. Do not give victim anything to drink if they are unconscious. Get medical attention.

INHALATION

Place unconscious person on the side in the recovery position and ensure breathing If respiratory problems, artificial respiration/oxygen. Get medical attention if any discomfort continues.

INGESTION

Rinse mouth thoroughly with water and give large amounts of milk or water to people not unconscious. Do not induce vomiting. If vomiting occurs, the head should be kept low so that stomach vomit doesn"t enter the lungs.

SKIN CONTACT

Promptly wash contaminated skin with soap or mild detergent and water. Promptly remove clothing if soaked through and wash as above. Use suitable lotion to moisturise skin.

EYE CONTACT

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 and get medical attention.

5 FIRE-FIGHTING MEASURES

2 / 5

REVISION DATE: 01/03/2006 SDS No.: 10703

MAKE UP/FLUSH FOR JET7237

EXTINGUISHING MEDIA

Use: Alcohol resistant foam. Carbon dioxide (CO2). Dry chemicals, sand, dolomite etc. Water spray, fog or mist.

SPECIAL FIRE FIGHTING PROCEDURES

Keep run-off water out of sewers and water sources. Dike for water control. Cool containers exposed to flames with water until well after the fire is out. Move container from fire area if it can be done without risk.

UNUSUAL FIRE & EXPLOSION HAZARDS

Vapours are heavier than air and may spread near ground to sources of ignition.

SPECIFIC HAZARDS

The product is flammable, and heating may generate vapours which may form explosive vapour/air mixtures.

PROTECTIVE MEASURES IN FIRE

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

6 ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS

Do not smoke, use naked flames or other sources of ignition. Provide adequate ventilation. Avoid inhalation of vapours and contact with skin and eyes. Wear protective clothing as described in Section 8 of this safety data sheet.

ENVIRONMENTAL PRECAUTIONS

Ensure that waste and contaminated materials are collected and removed from the work area as soon as possible in a suitably labelled container Do not discharge onto the ground or into water courses.

SPILL CLEAN UP METHODS

Solvent vapours may form explosive mixtures with air. Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Vapours are heavier than air and may travel along the floor and in the bottom of containers. Keep combustibles away from spilled material. Absorb in vermiculite, dry sand or earth and place into containers. Wash contaminated area with water. Wash thoroughly after dealing with a spillage.

7 HANDLING AND STORAGE

USAGE PRECAUTIONS

Do not use contact lenses. Keep away from heat, sparks and open flame. Static electricity and formation of sparks must be prevented. Use explosion proof electric equipment. Ventilate well, avoid breathing vapours. Use approved respirator if air contamination is above accepted level. Avoid spilling, skin and eye contact. Risk of vapour concentration on the floor and in low-lying areas. Contaminated rags and cloths must be put in fireproof containers for disposal. Eye wash facilities and emergency shower must be available when handling this product. STORAGE PRECAUTIONS

Flammable/combustible - Keep away from oxidisers, heat and flames. Store in tightly closed original container in a cool, dry well-ventilated place. Store below 25°C. May attack some plastics, rubber and coatings. Ground container and transfer equipment to eliminate static electric sparks. STORAGE CLASS

Flammable liquid storage.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Name	Std	LT - ppm	LT - mg/m3	ST - ppm	ST - mg/m3
ETHANOL	WEL	1000 ppm	1920 mg/m3		
BUTANOL-norm	WEL			50 ppm(Sk)	154 mg/m3(Sk)
BUTANONE	WEL	200 ppm(Sk)	600 mg/m3(Sk)	300 ppm(Sk)	899 mg/m3(Sk)

INGREDIENT COMMENTS

WEL = Workplace Exposure Limits

PROTECTIVE EQUIPMENT







PROCESS CONDITIONS

Provide eyewash station.

ENGINEERING MEASURES

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined workplace exposure limit is not exceeded.

HAND PROTECTION

Use protective gloves made of: Butyl rubber. P.T.F.E (Teflon). Unsuitable gloves: natural rubber or latex

3 / 5 REVISION DATE: 01/03/2006 SDS No.: 10703

MAKE UP/FLUSH FOR JET7237

EYE PROTECTION

Contact lenses should not be worn when working with this chemical! Wear approved safety goggles.

OTHER PROTECTION

Use engineering controls to reduce air contamination to permissible exposure level. Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact. Provide eyewash station and safety shower.

HYGIENE MEASURES

Wash promptly if skin becomes contaminated. Promptly remove non-impervious clothing that becomes contaminated. When using do not eat, drink or smoke.

9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE Liquid

ODOUR Pungent Ketonic.

VOLATILITY DESCRIPTION Highly volatile.

SOLUBILITY Soluble in most organic solvents

PHYSICAL DATA COMMENTS pH: Not applicable. Product does not dissociate in water.

 BOILING POINT (°C)
 60-90 @ 760 mm Hg
 RELATIVE DENSITY
 0.80 @ 25

 VAPOUR DENSITY (air=1)
 >1
 EVAPORATION RATE
 3-5 BuAc =1

 VISCOSITY
 2-10 cps 25
 FLASH POINT (°C)
 -6 CC (Closed cup).

AUTO IGNITION >500 FLAMMABILITY LIMIT - LOWER(%) 1.8

TEMPERATURE (°C)

FLAMMABILITY LIMIT - UPPER(%) 11.5 SOLUBILITY VALUE (g/100g <30

H2O@20°C)

10 STABILITY AND REACTIVITY

STABILITY

No particular stability concerns.

CONDITIONS TO AVOID

Avoid heat, flames and other sources of ignition. Avoid contact with strong oxidisers.

HAZARDOUS POLYMERISATION

Will not polymerise.

11 TOXICOLOGICAL INFORMATION

INHALATION

In high concentrations, vapours may irritate throat and respiratory system and cause coughing. Vapours have a narcotic effect and may cause headache, fatigue, dizziness and nausea.

INGESTION

Gastrointestinal symptoms, including upset stomach.

SKIN CONTACT

Repeated exposure may cause skin dryness or cracking.

EYE CONTACT

Irritation of eyes and mucous membranes.

MEDICAL SYMPTOMS

Central nervous system depression.

12 ECOLOGICAL INFORMATION

ECOTOXICITY

Little danger to the environment.

13 DISPOSAL CONSIDERATIONS

GENERAL INFORMATION

Waste is suitable for incineration.

DISPOSAL METHODS

Environmental manager must be informed of all major spillages. Collect in marked containers and deliver to approved depot. Make sure containers are empty before discarding (explosion risk).

REVISION DATE: 01/03/2006 SDS No.: 10

MAKE UP/FLUSH FOR JET7237

Ш

WASTE CLASS

European Waste Class (EWC) 08 03 12

14 TRANSPORT INFORMATION



UK ROAD CLASS 3

PROPER SHIPPING NAME PRINTING INK or PRINTING INK RELATED MATERIAL UN NO. ROAD 1210 UK ROAD PACK GR. Ш ADR CLASS NO. 3 ADR CLASS Class 3: Flammable liquids. ADR PACK GROUP Ш HAZARD No. (ADR) 33 ADR LABEL NO. F1 RID CLASS NO. 3 **RID PACK GROUP** UN NO. SEA 1210 IMDG CLASS 3 IMDG PAGE NO. 3 IMDG PACK GR. F-E, S-D Ш **EMS** MARINE POLLUTANT 1210 Nο UN NO. AIR

15 REGULATORY INFORMATION

LABELLING

AIR CLASS



3



Highly Flammable

RISK PHRASES

R11 Highly flammable.
R36 Irritating to eyes.

R66 Repeated exposure may cause skin dryness or cracking.

AIR PACK GR.

R67 Vapours may cause drowsiness and dizziness.

SAFETY PHRASES

S9 Keep container in a well-ventilated place.

S16 Keep away from sources of ignition - No smoking.

S25 Avoid contact with eyes.

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice

S37 Wear suitable gloves.

S51 Use only in well-ventilated areas.

S60 This material and its container must be disposed of as hazardous waste.

EU DIRECTIVES

Safety Data Sheet according to 91/155/EC as amended Dangerous Preparations Directive 1999/45/EEC. System of specific information relating to Dangerous Preparations. 2001/58/EEC.

APPROVED CODE OF PRACTICE

Classification and Labelling of Substances and Preparations Dangerous for Supply.

GUIDANCE NOTES

Workplace Exposure Limits EH40. CHIP for everyone HSG(108).

NATIONAL REGULATIONS

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2002. No. 1689.

5 / 5 REVISION DATE: 01/03/2006 SDS No.: 10703

MAKE UP/FLUSH FOR JET7237

Worplace Exposure Limits 2005 (EH40)

Control of Substances Hazardous to Health Regulations 2002 (as amended)

16 OTHER INFORMATION

ISSUED BY

Chemical Safety Adviser

REVISION DATE 01/03/2006

REV. NO./REPL. SDS GENERATED 1

RISK PHRASES IN FULL

R10 Flammable.
R11 Highly flammable.
R22 Harmful if swallowed.
R36 Irritating to eyes.

R37/38 Irritating to respiratory system and skin.

R41 Risk of serious damage to eyes.

R66 Repeated exposure may cause skin dryness or cracking.

R67 Vapours may cause drowsiness and dizziness.

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.