Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II - United Kingdom (UK)

SAFETY DATA SHEET

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

Identification of the substance or mixture

Product name : SMF Black
Product code : 1456087
Product type : liquid

Use of the substance/mixture

Uses

None identified.

Manufacturer : INX Digital Czech a.s.
250 01 Brandýs nad Labem
,
Czech Republic

Supplier : INX Digital Czech a.s.
Pražská 298
Brandys nad Labem, 250 01
Czech Republic
+420 326.914.083

Product Safety (EHS) Phone : +420 326.914.083

MSDS Email Information : MSDS@inxintl.com

2. HAZARDS IDENTIFICATION

Hazard symbol or symbols :

Harmful

Classification : Xn, R20/21

Physical/chemical hazards : Not applicable.
Human health hazards : Harmful by inhalation and in contact with skin.
Environmental hazards : Not applicable.
Additional hazards : Not available.

See Section 11 for more detailed information on health effects and symptoms.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient name	CAS number	%	EC number	Classification
Butoxyethyl Acetate	112-07-2	50,0000 - 70,0000	203-933-3	Xn; R20/21 [1]2
Cyclohexanone	108-94-1	10,0000 - 12,5000	203-631-1	R10 Xn; R20 [][1]2

Butanolide, 4-	96-48-0	5,0000 - 7,0000	202-509-5	Xn; R22 Xi; R36 [1]
Carbon Black	1333-86-4	3,0000 - 5,0000	215-609-9	Xi; R36/37 [1]2

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
[4] vPvB

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

4. FIRST AID MEASURES

First aid measures

Inhalation :

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Ingestion :

Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin contact :

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Eye contact :

Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

Protection of first-aiders :

No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

Notes to physician :

Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

See Section 11 for more detailed information on health effects and symptoms.

5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable :

Use dry chemical, CO2, water spray (fog) or foam.

Not suitable :

Do not use water jet.

Special exposure hazards :

Combustible liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Hazardous thermal decomposition products :

Decomposition products may include the following materials: carbon dioxide carbon monoxide

Special protective equipment for fire-fighters :

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode., Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions :

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).

Environmental precautions :

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods for cleaning up

Small spill :

Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor.

Large spill :

Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. 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). Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

7. HANDLING AND STORAGE

Handling :

Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.

Storage :
Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Packaging materials

Recommended :
Use original container.

Exposure Scenario information :
Not available.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limit values

Ingredient name	Occupational exposure limits
2-butoxyethyl acetate	**EU OEL (2000-06-01) Notes: Identifies the possibility of significant uptake through the skin. Indicative** Time Weighted Average (TWA) 133 mg/m3 , 20 ppm **EU OEL (2000-06-01) Notes: Identifies the possibility of significant uptake through the skin. Indicative** Short Term Exposure Limit (STEL) 333 mg/m3 , 50 ppm **EH40/2005 WELs (2001-12-01) Notes: Can be absorbed through skin** Time Weighted Average (TWA) , 20 ppm **EH40/2005 WELs (2001-12-01) Notes: Can be absorbed through skin** Short Term Exposure Limit (STEL) , 50 ppm
cyclohexanone	**EU OEL (2000-06-01) Notes: Identifies the possibility of significant uptake through the skin. Indicative** Time Weighted Average (TWA) 40,8 mg/m3 , 10 ppm **EU OEL (2000-06-01) Notes: Identifies the possibility of significant uptake through the skin. Indicative** Short Term Exposure Limit (STEL) 81,6 mg/m3 , 20 ppm **EH40/2005 WELs (2003-05-01) Notes: Can be absorbed through skin** Short Term Exposure Limit (STEL) , 20 ppm **EH40/2005 WELs (2003-05-01) Notes: Can be absorbed through skin** Time Weighted Average (TWA) , 10 ppm
Carbon black	**EH40/2005 WELs (1997-01-01)** Short Term Exposure Limit (STEL) 7 mg/m3 **EH40/2005 WELs (1997-01-01)** Time Weighted Average (TWA) 3,5 mg/m3

Recommended monitoring procedures :
If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to European Standard EN 689 for methods for the assessment of exposure by inhalation to chemical agents and national guidance documents for methods for the determination of hazardous substances.

Exposure controls

Occupational exposure controls :
Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other

engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Hygiene measures :

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Respiratory protection :

Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Hand protection :

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Eye protection :

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts.

Skin protection :

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Environmental exposure controls :

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9. PHYSICAL AND CHEMICAL PROPERTIES

General information

Appearance

Physical state	**:**	liquid	
Color	**:**	Black.	
Flash point	**:**	> 60 - 93 °C	
Relative density	**:**	0,97	
Volatile.	**:**	90,77 %(m)Weight %	92,56 %(V)Volume %
VOC	**:**	90,77 %(m)Weight %	92,56 %(V)Volume %

10. STABILITY AND REACTIVITY

Chemical stability :

The product is stable.

Conditions to avoid :

Avoid all possible sources of ignition (spark or flame).

Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

Materials to avoid :

Reactive or incompatible with the following materials:

oxidizing materials

Hazardous decomposition products :

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. TOXICOLOGICAL INFORMATION

Toxicokinetics

Acute toxicity

Chemical name	Test	Species	Dose	Exposure
Butoxyethyl Acetate	Oral LD50	Rat	2 400 mg/kg	-
Butanolide, 4-	Oral LD50	Rat	1 540 mg/kg	-
Butanolide, 4-	Oral LD50	Rat	1 580 mg/kg	-
Carbon Black	Oral LD50	Rat	> 15 400 mg/kg	-
Carbon Black	Oral LD50	Rat	> 15 400 mg/kg	-

Conclusion/Summary : Not available.

Potential chronic health effects

Chronic toxicity

Conclusion/Summary : Not available.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation

Conclusion/Summary

Skin : Not available.

eyes : Not available.

Respiratory : Not available.

Sensitizer

Conclusion/Summary

Skin : Not available.

Respiratory : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Mutagenicity

Conclusion/Summary : Not available.

Teratogenicity

Conclusion/Summary : Not available.

Reproductive toxicity

Conclusion/Summary : Not available.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

12. ECOLOGICAL INFORMATION

Aquatic ecotoxicity

Chemical name	Test	Result	Species	Exposure
Cyclohexanone	Fresh water	32,9 mg/l	Green algae	3 d
Cyclohexanone	Fresh water	630 mg/l	Fathead minnow	4 d
Cyclohexanone	Fresh water	527 mg/l	Fathead minnow	4 d
Cyclohexanone	Fresh water	732 mg/l	Fathead minnow	4 d

Conclusion/Summary : Not available.

Biodegradability

Conclusion/Summary : Not available.
Other adverse effects : No known significant effects or critical hazards.

13. DISPOSAL CONSIDERATIONS

Methods of disposal :
The generation of waste should be avoided or minimized wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. 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.
Hazardous waste :
The classification of the product may meet the criteria for a hazardous waste.
Exposure Scenario information :
Not available.

14. TRANSPORT INFORMATION

International transport regulations

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
ADN/ADNR Class		Not Restricted.		-	-	
ADR/RID Class		Not Restricted.		-	-	
IATA Class		Not Restricted.		-	-	
IMDG Class		Not Restricted.		-	-	

PG* : Packing group

15. REGULATORY INFORMATION

EU regulations

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.
Hazard symbol or symbols :

Harmful

Risk phrases : R20/21 - Harmful by inhalation and in contact with skin.

Safety phrases : S36/37 -Wear suitable protective clothing and gloves.

Contains : 2-butoxyethyl acetate

Prior Informed Consent. List of chemicals subject to the international PIC procedure (Part I, II, III) :

Other EU regulations

Additional warning phrases	**:**	Not applicable.
Containers to be fitted with child-resistant fastenings	**:**	Not applicable.
Tactile warning of danger	**:**	Not applicable.
Restrictions on the Marketing and Use Directive	**:**	

National regulations
International regulations

16. OTHER INFORMATION

Restrictions on use

Uses	**:**	None identified.

History

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Prepared by	**:**	MEEKJ

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